The Stock Market Reaction To Trump's Surprise Election Win

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Washington (CNN) Hillary Clinton's odds of winning the presidency rose from 78% last week to 91% Monday before Election Day, according to CNN's Political Prediction Market.

PredictWise Says!

Trump's Victory Probability

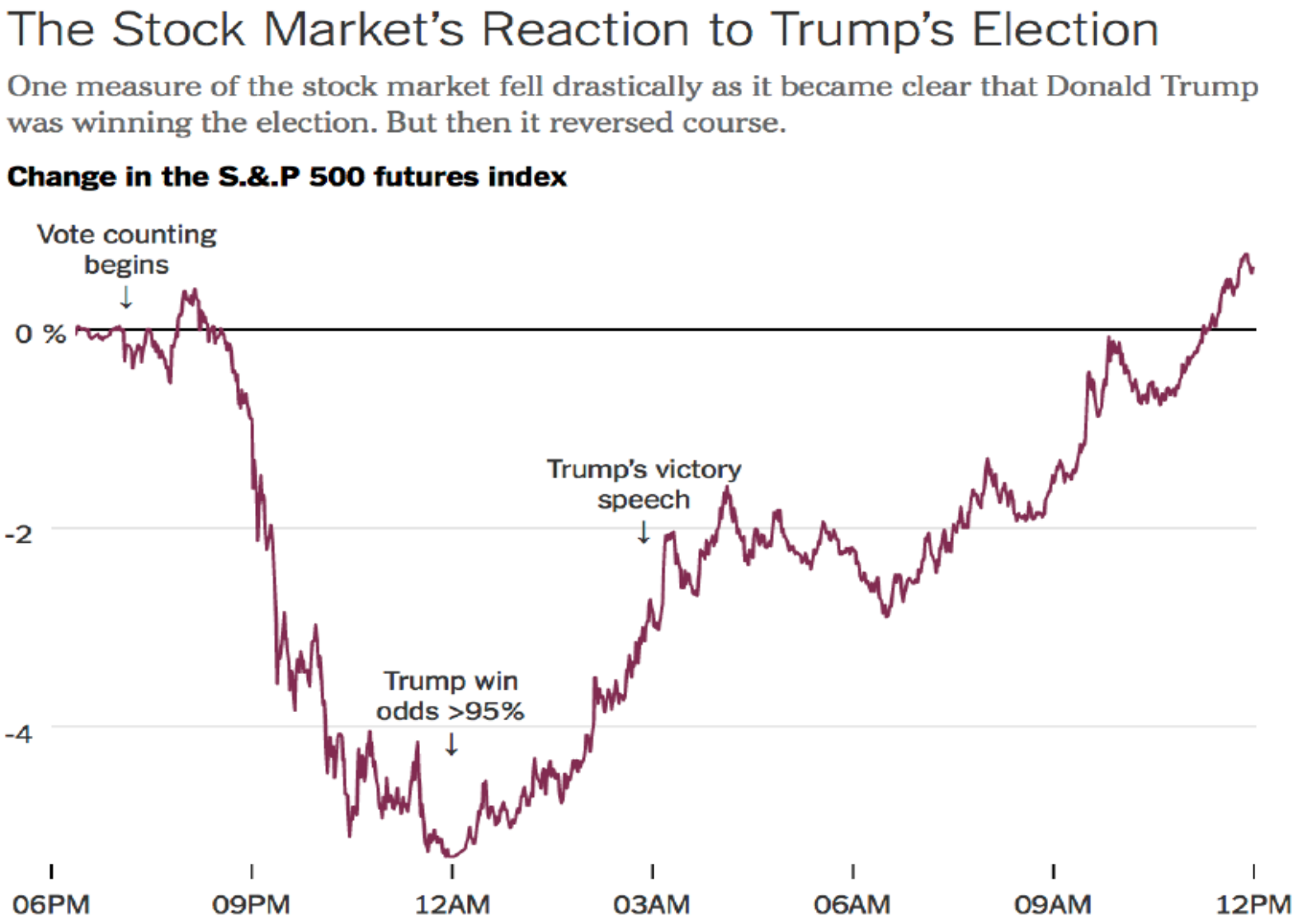
November 8, 10:19am: 12%

November 8, 8:41pm: 7%

November 9, 3:17am: 100%

Trump Wins!

Initially, stocks fell sharply in after-hours trading

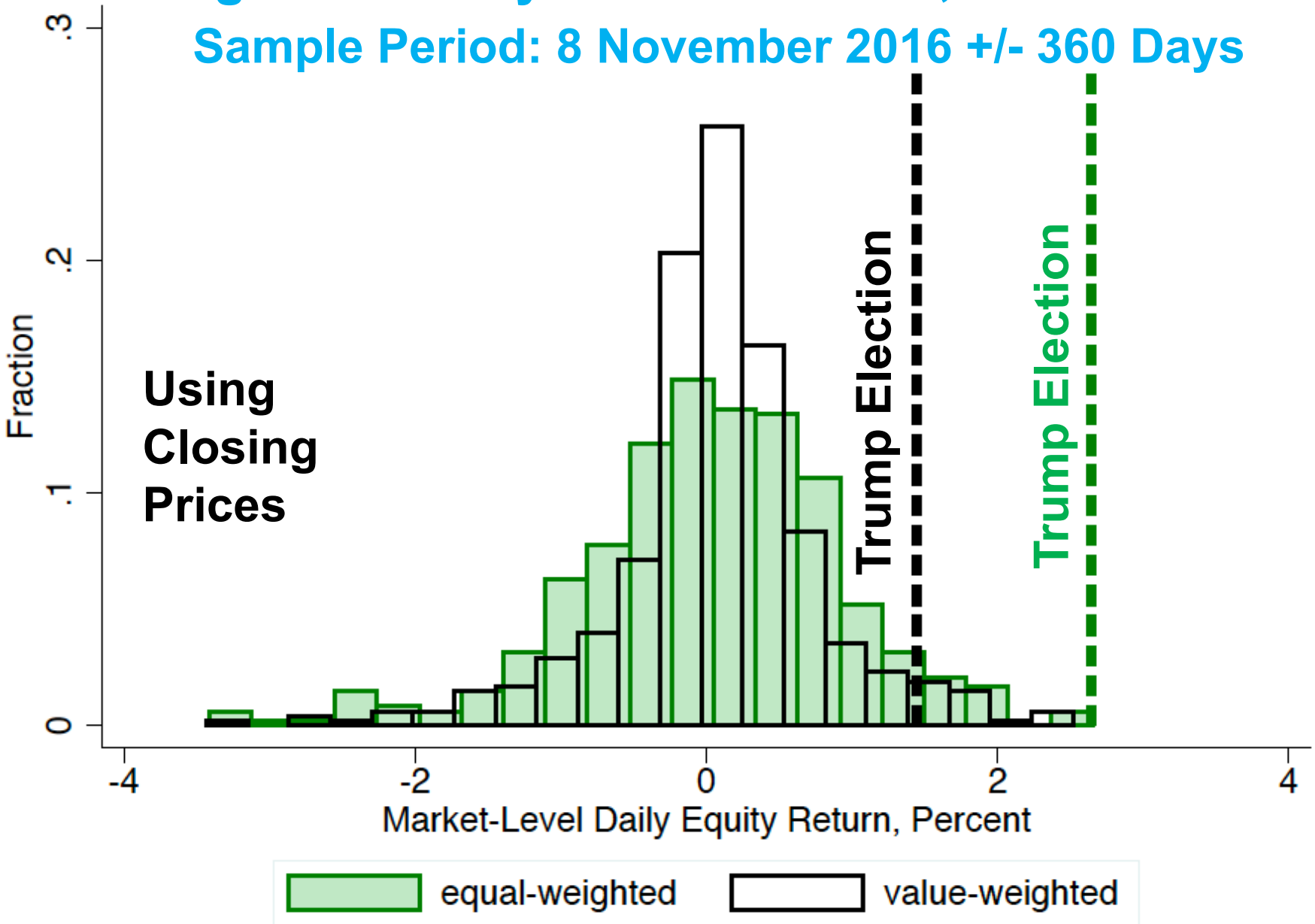


From "Markets Sent a Strong Signal on Trump … Then Changed Their Minds," Justin Wolfers, *New York Times*, 18 November 2016

But Stocks Boomed on 9 November

Histogram of Daily Market Returns, U.S. Stocks

Sample Period: 8 November 2016 +/- 360 Days



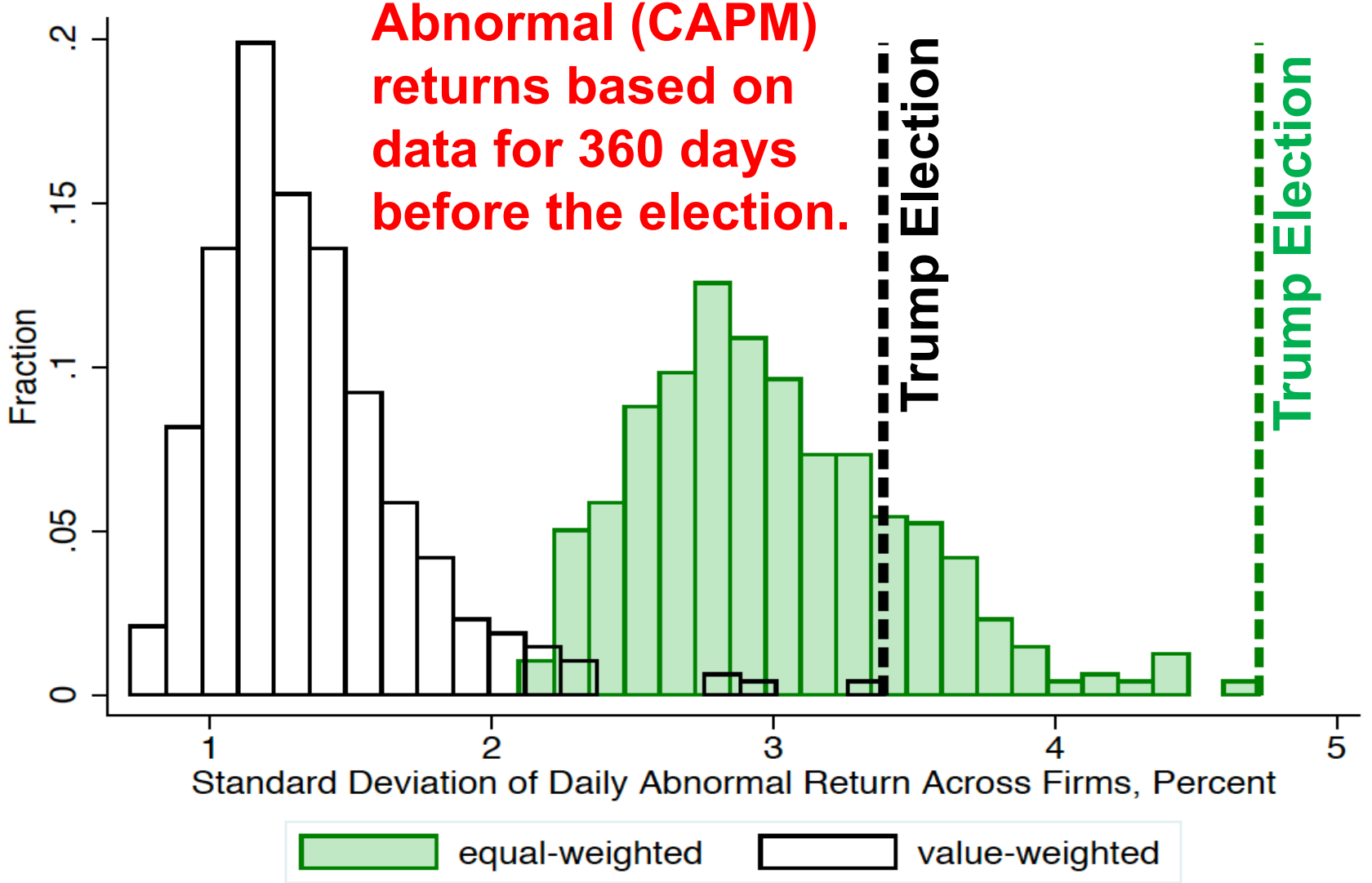
Justin Wolfers, *New York Times,* 18 November 2016: “Throughout the campaign, stocks rose whenever campaign developments made it less likely that Mr. Trump would be elected.”

This assessment rests on Wolfers’ pre-election empirical study with Erik Zitzewitz.

Their bottom line: “[W]e estimate that market participants believe that a Trump victory would reduce the value of the S&P 500, the UK, and Asian stock markets by 10-15%.”

The Cross-Firm Dispersion of Abnormal Returns Was Very High in the Wake of Trump's Victory

Histogram of Cross-Firm St. Dev. of Daily Abnormal Returns
Sample Period: 8 November 2016 +/- 360 Days



Two More Observations

1. The huge dispersion in firm-level returns continued on November 10, Day 2 after the 2016 election.
2. Firm-level returns are not especially dispersed in the wake of other (recent) past presidential elections.

Distance on indicated day from mean in two-year centered window around the election date. Distance values reported in standard deviation units.

	Mean		SD		IQR	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
2016 Presidential Election [Baseline Sample]						
+ 1 days (2449 stocks)	2.9	1.8	4.7	5.8	5.9	5.6
+ 2 days (2449 stocks)	1.4	0.1	3.1	4.0	5.0	8.0
+ 3 days (2447 stocks)	2.1	0.2	2.1	2.1	3.3	1.4
2016 Presidential Election [Comparable Sample]						
+ 1 days (2899 stocks)	2.9	1.8	4.7	5.7	5.6	5.9
+ 2 days (2898 stocks)	1.3	0.3	2.9	4.1	4.7	7.6
+ 3 days (2897 stocks)	1.9	0.2	2.0	2.0	3.3	1.4
2012 Presidential Election [Comparable Sample]						
+ 1 days (2763 stocks)	-2.6	-2.8	1.9	1.8	2.5	2.9
+ 2 days (2763 stocks)	-1.4	-1.6	1.4	0.5	0.9	-0.3
+ 3 days (2763 stocks)	0.0	0.0	0.7	-0.3	-0.4	-1.4

	Mean		SD		IQR	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
2008 Presidential Election [Comparable Sample]						
+ 1 days (2794 stocks)	-2.1	-2.3	1.4	1.1	1.5	1.3
+ 2 days (2794 stocks)	-1.7	-2.2	1.5	1.1	1.7	1.5
+ 3 days (2794 stocks)	0.7	1.2	0.8	0.5	0.4	0.1
2004 Presidential Election [Comparable Sample]						
+ 1 days (3169 stocks)	1.5	1.7	0.3	1.2	0.9	1.1
+ 2 days (3169 stocks)	1.2	2.1	1.4	1.1	0.7	-0.1
+ 3 days (3169 stocks)	0.5	0.5	0.5	0.8	0.5	0.2
2000 Presidential Election [Comparable Sample]						
+ 1 days (3311 stocks)	-0.8	-1.3	-0.4	1.0	-0.1	1.0
+ 2 days (3309 stocks)	-0.9	-0.6	-0.1	0.7	0.0	0.5
+ 3 days (3308 stocks)	-1.6	-1.8	-0.4	0.6	0.6	1.3

Summarizing

1. Trump's election win: a huge surprise.
2. Aggregate stock market reaction: another huge surprise.
3. Firm-level equity returns varied enormously in the wake of Trump's victory.

These observations don't hold for other (recent) past U.S. presidential elections.

We examine firm-level equity returns in reaction to Trump's Victory.

1. Trump and Clinton were far apart on many policy issues: regulation, healthcare, trade, taxes, etc. **Not a Tweedledee vs. Tweedledum election!!**
2. Firms differ in their exposures to policy risks.
3. Quantify these risks using Part 1a ("Risk Factors") of listed firms' annual 10-K filings.
4. Trump's surprise victory abruptly shifted the level and structure of policy risks.
5. We look to the cross-section of firm-level returns to assess the effects of that shift and gain insight into the market's reaction to Trump's win.

Analysis Sample

- Common equity securities (primary issue) traded on AMEX, NYSE and NASDAQ of firms incorporated in the United States, with prices quoted in U.S. Dollars.
- **Daily closing prices**, shares outstanding and shares traded from Compustat North America, with adjustments for stock splits, reverse splits, dividends, etc. Market return data from Ken French's website.
- Main sample: **$\pm$360 calendar days from Nov 8, 2016**
- 3,606 firms with closing prices on 8 and 9 November.
- Matched to 3,383 firms with at least one 10-K filing (with non-empty Part 1a) from January 2006 to July 2016.
  - Part 1a is not obligatory for all listed firms.
- Drop 102 firms with no NAICS code. Drop 20 with fewer than 126 daily return observations in pre-election window.
- **3,261 firms:** About 1.5 million daily return observations.
- Main analysis sample: **2,449 firms** (dropping small caps)

Part 1A of the 10-Ks

- Since 2006 (for FY 2005) the SEC requires most publicly held firms to include a separate discussion of "Risk Factors" in Part 1a of their annual 10-K filings.
- In explaining "How to Read a 10-K" at www.sec.gov/answers/reada10k.htm, the SEC describes Part 1a as follows:
  - **Item 1A - "Risk Factors"** includes information about the most significant risks that apply to the company or to its securities. Companies generally list the risk factors in order of their importance. In practice, this section focuses on the risks themselves, not how the company addresses those risks. Some risks may be true for the entire economy, some may apply only to the company's industry sector or geographic region, and some may be unique to the company.

How We Use Part 1A

1. Define policy categories. Associate each one with a specific set of terms and compound terms.
2. Treat sentences in Part 1A as the unit of speech.
3. Assign a sentence to a policy category, if it contains a term in the corresponding category-specific term set.
4. Disambiguate generic references to ”regulation”, “taxes,” etc. in a given sentence by first “looking back” and then “looking forward” in the text. If disambiguation fails, assign the sentence to a generic “tax” or “regulation” category.
5. For each Part 1A, calculate the ***percentage*** of sentences that pertain to each policy category.
6. Average the percentages over available years for each firm and policy category to get a firm-specific vector of policy risk exposures.

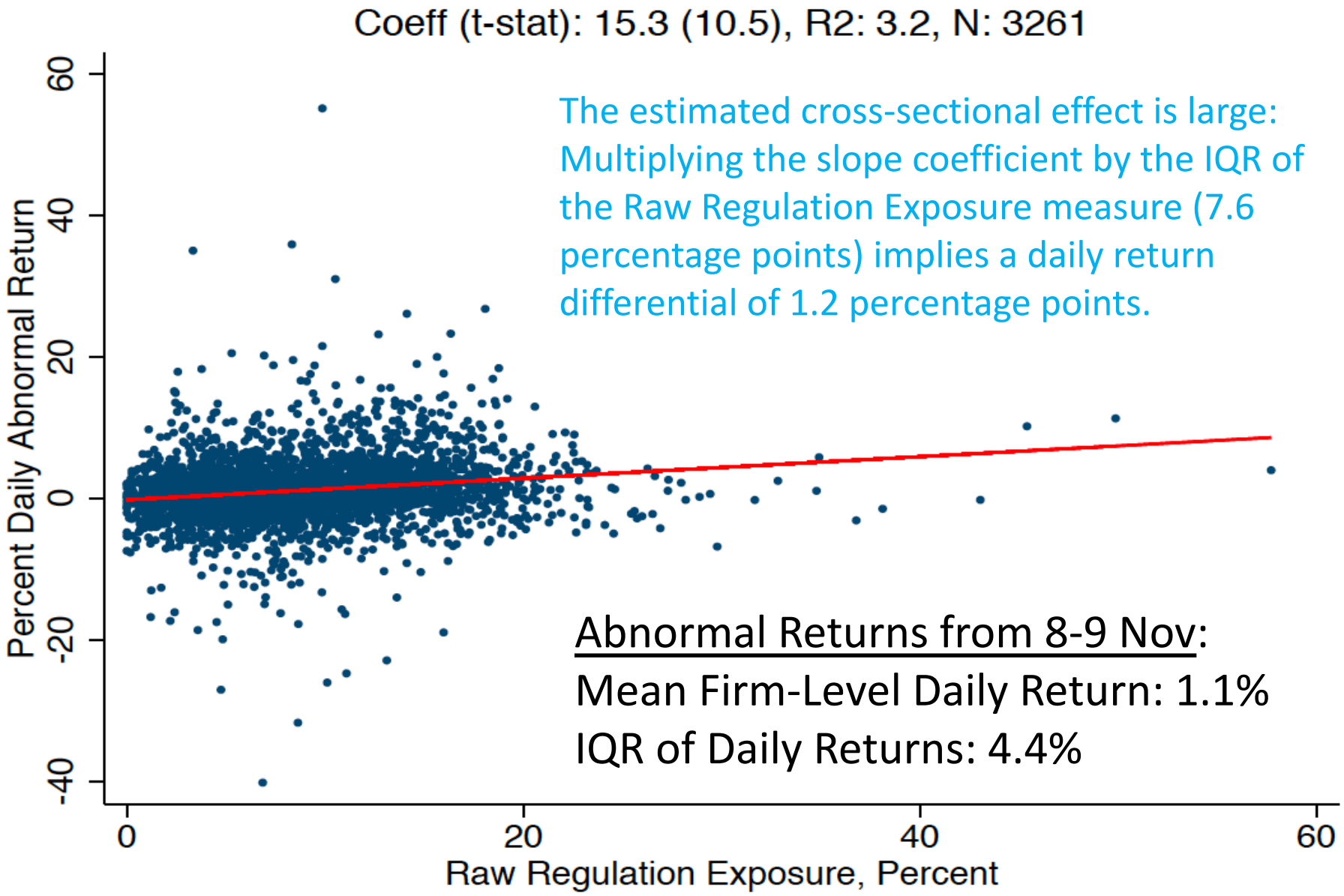
Earlier Work Using Part 1A to Quantify Firm-Level Policy Risk Exposures

- Our method for quantifying firm-level policy risk exposures builds on the use of 10-K filings in Baker, Bloom and Davis (2016) and Davis (2017).
- We improve on their work in three respects:
  - Greater granularity of policy categories
  - Better term sets, informed by extensive human readings of Part 1A in the 10-K filings
  - Use of “look back” and “look ahead” code in the computer-automated readings to disambiguate generic policy references.

A Warm-Up Investigation

1. For each 10-K filing with a non-empty Part 1a:
   - Calculate the ***percentage*** of sentences in Part 1a that contains "regulation," "regulate" or "regulatory."
   - Average this percentage over years for each firm.
2. This average value is our measure of Raw Regulation (Risk) Exposure for the firm.
3. Compute the firm's daily return as 100 X log change in the closing price from November 8 to November 9.
4. Obtain the CAPM abnormal return for each firm from November 8 to 9.
5. Relate Raw Regulation Exposure to abnormal equity returns in reaction to Trump's surprise election victory.
6. Plot the firm's daily return against its Raw Regulation Exposure.

Firms with greater exposure to “regulation” had higher abnormal returns on 9 November



Policy Categories

Financial Regulation
Intellectual Property Policy
Labor Regulations
Food and Drug Regulations
Healthcare Policy
Competition Policy
Environmental & Energy Policy:
- Green Energy
- Brown Energy
- Generic Energy Policy
- Other Environmental

Other Regulation
Generic Regulation
International Trade Policy
Monetary Policy
Government Spending, Deficits & Debt
Entitlement & Welfare Programs
National Security
Transportation, Infrastructure & Public Utilities
Tax-Filing Services
Individual Income Taxes
Taxes on Dividends & Cap Gains
Property Taxes
Sales & Excise Taxes
Payroll Taxes
Corporate Taxes:
- Treatment of Foreign Income
- Business Tax Savings
- Taxes on Business Profits
- Energy Taxes
- International Trade Taxes

Generic Taxes
Immigration
Governance and Elections
Lawsuit & Tort Reform, SC Cases
Housing & Land Management
Agriculture

A Simple Example

Food & Drug Regulation:

Assign a sentence to this policy category, if it contains one (or more) terms in the following term set:

{prescription drug act}, {drug policy}, {food and drug administration, FDA}, {Federal Food Drug and Cosmetic Act, FD&C Act}, {Hatch-Waxman Act, Patent Term Restoration Act}, {Orphan Drug Act}

This simple example follows the same approach as BBD (2016) and Davis (2017). It makes no use of:

1. AND operators to construct conditional term sets
2. Look back or look ahead code to disambiguate generic policy-relevant terms.

A More Complex Example: Environmental & Energy Policy

Brown Energy:

{cap and trade}, {cap and tax}, {offshore drilling}, {clean air act, clean water act, regional haze program, hazardous air pollutants, NESHAP}, {corporate average fuel economy, CAFE standard}, {Keystone pipeline}, {Alaska oil pipeline, Trans-Alaska pipeline}, {Pipeline and Hazardous Materials Safety Administration}, {Nuclear Regulatory Commission},

{(emissions, pollutants, pollution, drilling, BTU, coal, fossil, fossil fuel, oil, petroleum, carbon, dioxide, co2, co 2, greenhouse gas, GHG, natural gas, ozone, fine particulate, regional haze, mercury, effluent, ash, refinery, refined fuel, toxic, sulfur, diesel, asphalt, kerosene, methane, hazardous substances) AND (tax, taxation, controls, restrictions, limits, caps, quotas, permits, standards, requirements, mandates)}

Environmental & Energy Policy

Green Energy:

{(renewable, clean, wind, solar, ocean, tidal, wood waste, solid waste) AND (energy, power) AND (subsidies, tax credit, tax exempt, tax exemption, tax benefit, tax attribute, tax savings, tax deduction, tax deductible, tax protected, tax protection, accelerated depreciation, depreciation credit, loan guarantees, PTC, ITC, grants, cost recovery, MACRS)},

{(biomass, geothermal, hydropower, landfill gas, biogas, ethanol, biodiesel, biofuel, alcohol fuel, alternative energy, alternative power) AND (subsidies, tax credit, tax exempt, tax exemption, tax benefit, tax attribute, tax savings, tax deduction, tax deductible, tax protected, tax protection, accelerated depreciation, depreciation credit, loan guarantees, PTC, ITC, grants, cost recovery, MACRS)}

Environmental & Energy Policy

Generic Energy Policy:

Assign a sentence to this policy category if:

1. It contains one of the following terms:

{energy policy, energy regulation, energy legislation}, {Renewable Portfolio Standard, RPS, Renewable Fuel Standard, RFS}, {Federal Energy Regulatory Commission, FERC}

2. It does not contain a term in **Brown** or **Green Energy.**
3. It does not disambiguate to **Brown** or **Green Energy** when using the “look back” and “look ahead” procedure.

Other Environmental:

{wetlands protection}, {endangered species}, {Environmental Protection Agency, EPA}

Look Back / Look Ahead Details

We often encounter sentences that mention “regulation” but do not specify the type of regulation. We seek to disambiguate these generic references to regulation as follows:

1. Look back 1, 2,…,5 sentences for a term in one of our specific regulation categories. If we encounter such a term, assign Sentence 0 to that regulation category and stop.
2. If Step 1 does not disambiguate Sentence 0, then look ahead 1,2,,…,5 sentences …
3. If Step 2 does not disambiguate Sentence 0, then look back 6,7,…,10 sentences …
4. If Step 3 does not disambiguate Sentence 0, then assign it to the Generic Regulation category.

We take the same approach to disambiguating generic references to “taxes” and “energy policy”.

Variables	N	%	Mean		IQR		max
		> 0	All	> 0	All	> 0	(%)
Percent Daily Abnormal Return	2449	61.1	1.1	3.4	4.3	3.2	35.0
Generic Regulation	2449	98.5	3.7	3.7	3.3	3.2	53.0
Labor Regulations	2449	38.6	0.4	1.1	0.3	1.0	12.9
Generic Energy	2449	7.8	0.2	2.1	0.0	3.1	11.1
Brown Energy	2449	49.2	1.7	3.5	1.2	3.4	41.5
Green Energy	2449	3.6	0.0	0.9	0.0	0.8	10.8
Healthcare Policy	2449	35.0	1.1	3.1	0.4	3.4	30.2
Food and Drug Regulation	2449	18.0	1.5	8.5	0.0	11.9	51.0
Intellectual Property Policy	2449	23.1	0.2	0.8	0.0	0.9	7.4
Trade Policy	2449	39.0	0.4	1.1	0.4	1.1	14.3
Financial Regulation	2449	57.5	2.2	3.8	1.2	3.7	38.7
Monetary Policy	2449	24.3	0.3	1.3	0.0	1.8	18.4
Govt Purch. and Fiscal Policy	2449	31.7	0.1	0.4	0.1	0.3	5.3
Entitlement and Welfare	2449	12.2	0.0	0.2	0.0	0.2	1.4
Taxes on Business Profits	2449	10.5	0.1	0.7	0.0	0.6	6.8
Business Tax Credits	2449	53.2	1.3	2.5	1.1	2.2	24.2
Foreign Profits Taxation	2449	61.2	0.9	1.4	1.2	1.7	18.7
Sales and Excise Taxes	2449	22.4	0.2	0.9	0.0	0.9	22.4
Tax-Filing Services	2449	1.1	0.0	1.8	0.0	1.4	17.2
Generic Taxes	2449	82.6	0.9	1.1	1.0	1.0	35.0
Taxes on Dividends	2449	1.8	0.0	0.3	0.0	0.3	1.3
Taxes on Individual Income	2449	3.6	0.0	0.4	0.0	0.3	4.9
Property Taxes	2449	7.9	0.0	0.5	0.0	0.7	5.3
Other Environmental Reg.	2449	18.9	0.4	2.3	0.0	3.0	14.0

Main Sample Summary Statistics: Selected Categories

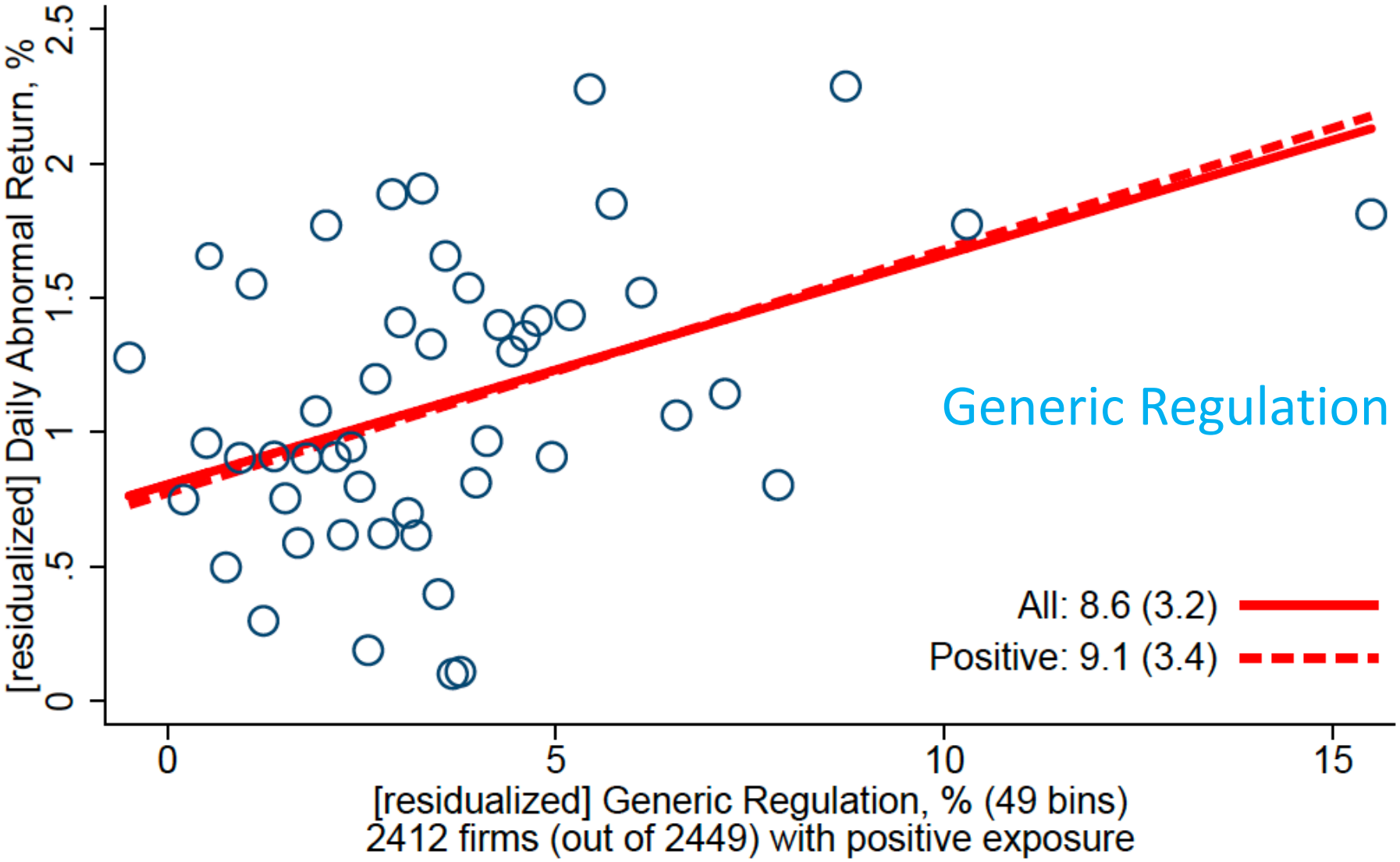
Our main sample considers firms in the Russell 3000 with share price greater than $5.

Our Basic Firm-Level Abnormal Return Regression

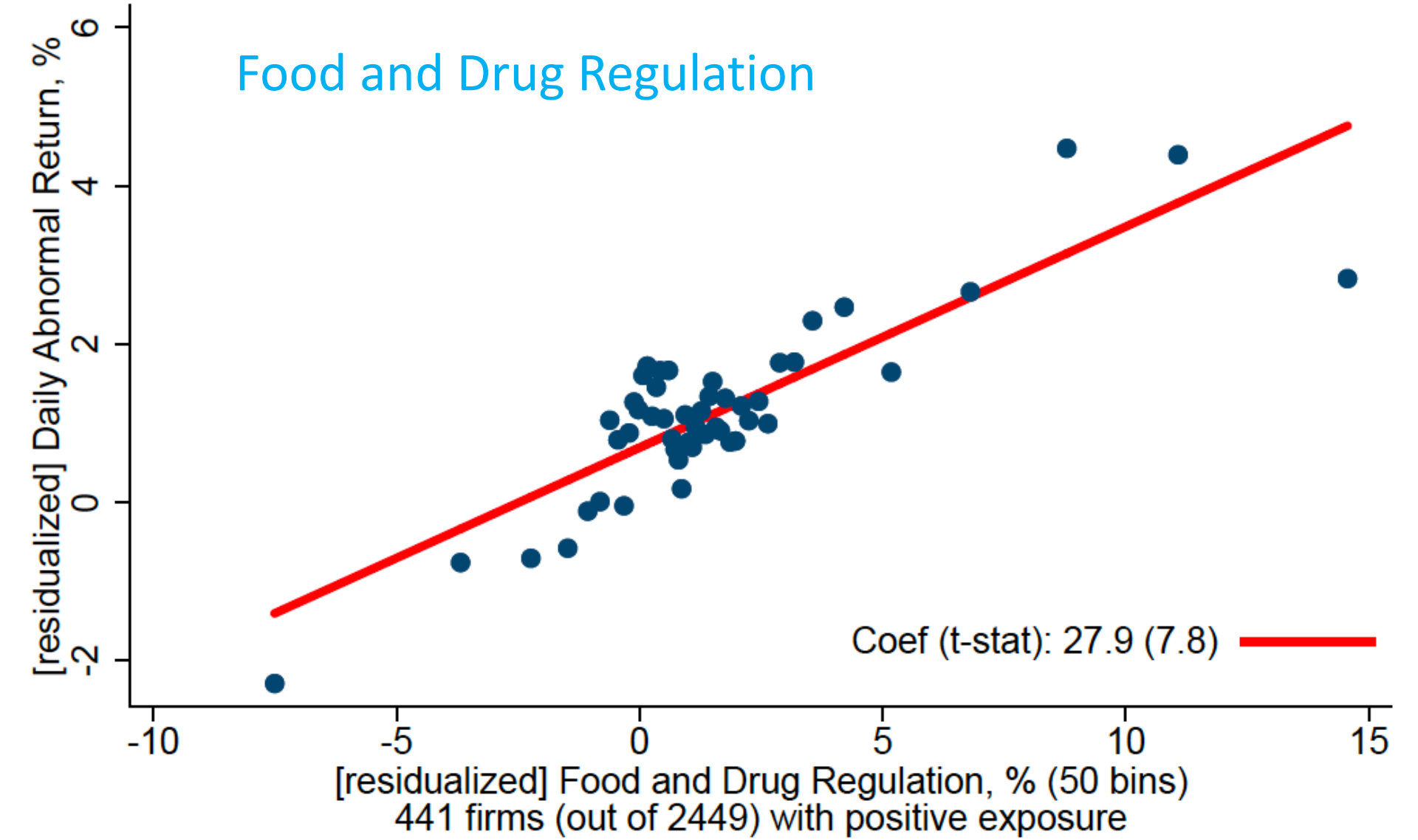
Dependent Variable: Daily Abn. Return from Nov 8 to 9	**Coeff**	**(t-stat)**	**Coeff * IQR**	
			IQR|All	IQR|Exp.>0
Generic Regulation	8·6***	(3·2)	0·28	0·28
Labor Regulations	30·1***	(5·3)	0·08	0·31
Generic Energy	−60·7***	(−10·2)	0·00	−1·91
Brown Energy	8·0***	(4·4)	0·10	0·27
Green Energy	−79·4***	(−4·8)	0·00	−0·67
Healthcare Policy	−19·0***	(−3·6)	−0·08	−0·64
Food and Drug Regulation	27·9***	(7·8)	0·00	3·31
Intellectual Property Policy	46·3***	(3·0)	0·00	0·42
Trade Policy	5·6	(0·8)	0·02	0·06
Financial Regulation	6·6***	(3·4)	0·08	0·25
Monetary Policy	9·0	(0·9)	0·00	0·16
Govt Purch. and Fiscal Policy	136·6***	(5·7)	0·12	0·44
Entitlement and Welfare	−169·8	(−1·5)	0·00	−0·37
Taxes on Business Profits	3·8	(0·2)	0·00	0·02
Business Tax Credits	−14·4***	(−6·2)	−0·16	−0·31
Foreign Profits Taxation	−19·0***	(−3·5)	−0·23	−0·32
Sales and Excise Taxes	−30·7***	(−3·2)	0·00	−0·29
Tax-Filing Services	−21·7**	(−2·0)	0·00	−0·30
Generic Taxes	−7·5	(−1·5)	−0·07	−0·08
Log Market Cap	−0·4***	(−8·5)	−0·91	−0·91
Leverage	−0·7*	(−1·8)	−0·23	−0·21
Observations [Adjusted R^2]	2449 [0.197]			

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

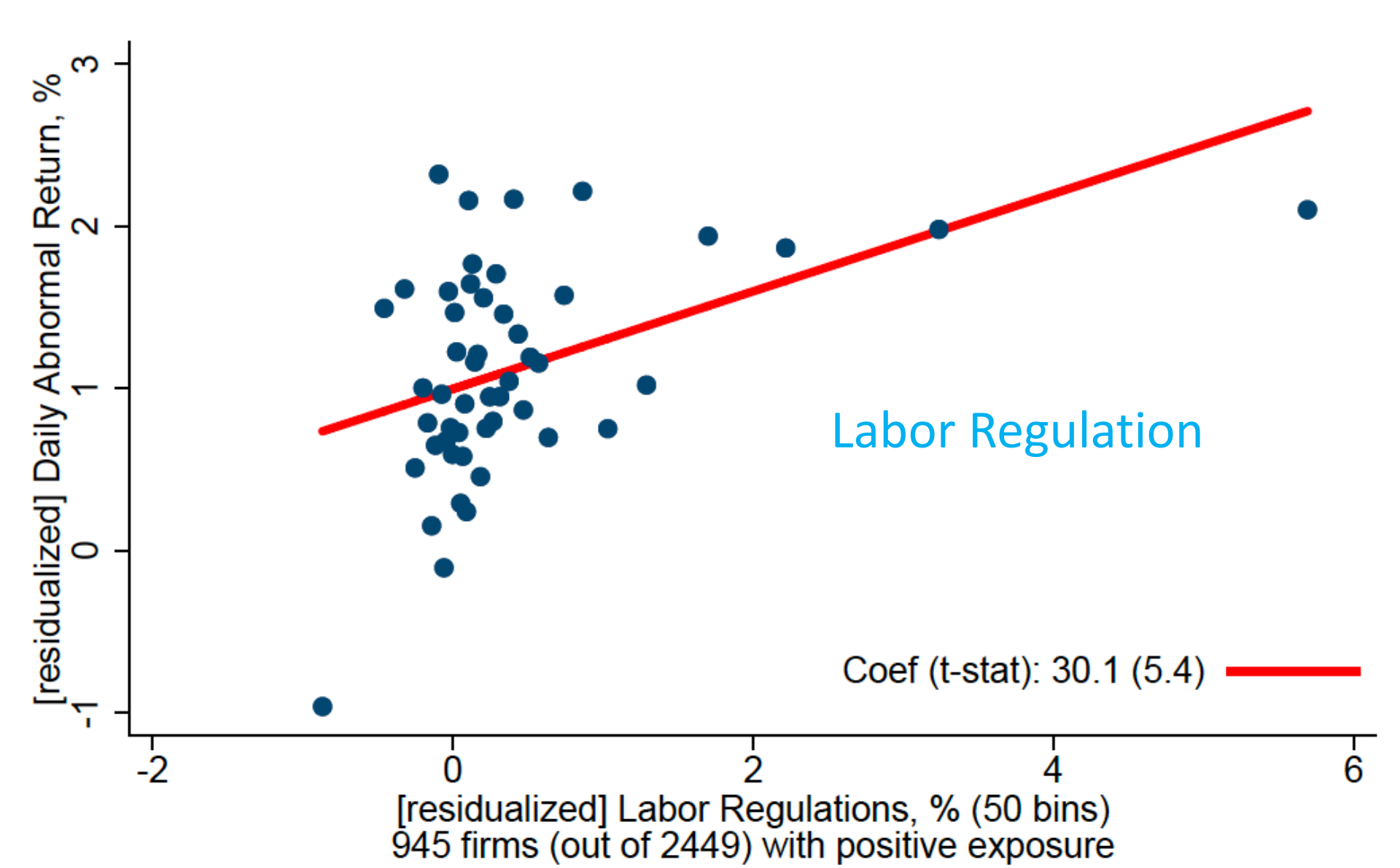
Partial Regression Scatter Plots



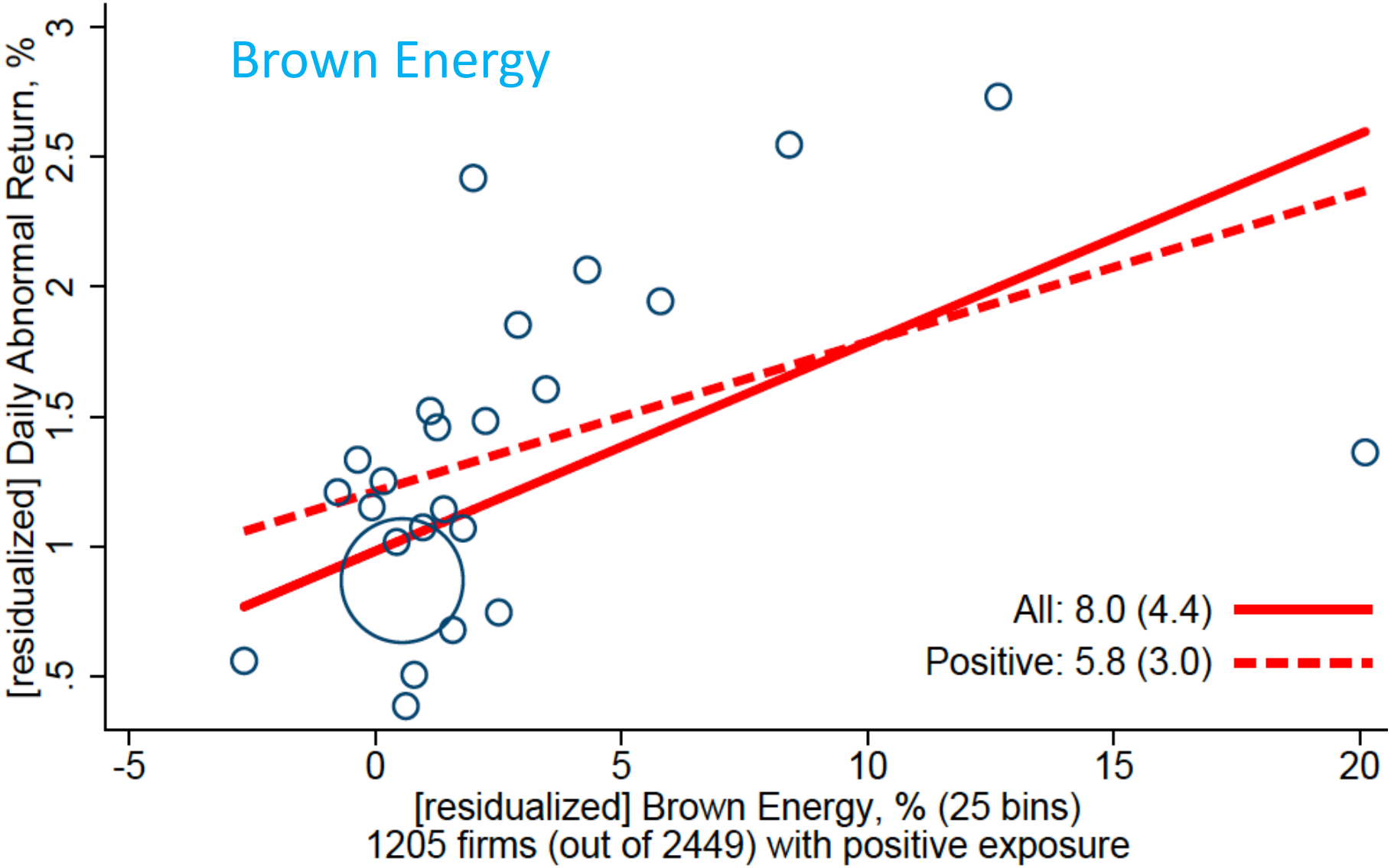
The three stocks with the highest residualized exposure are related to the following companies:
`"GORMAN-RUPP CO"' (Exposure: 53.0%, TIC: `"GRC"', Abn. ER: 10.1%)
`"CENTURY BANCORP INC/MA"' (Exposure: 41.7%, TIC: `"CNBKA"', Abn. ER: -0.2%)
`"STERICYCLE INC"' (Exposure: 25.6%, TIC: `"SRCL"', Abn. ER: -1.5%)



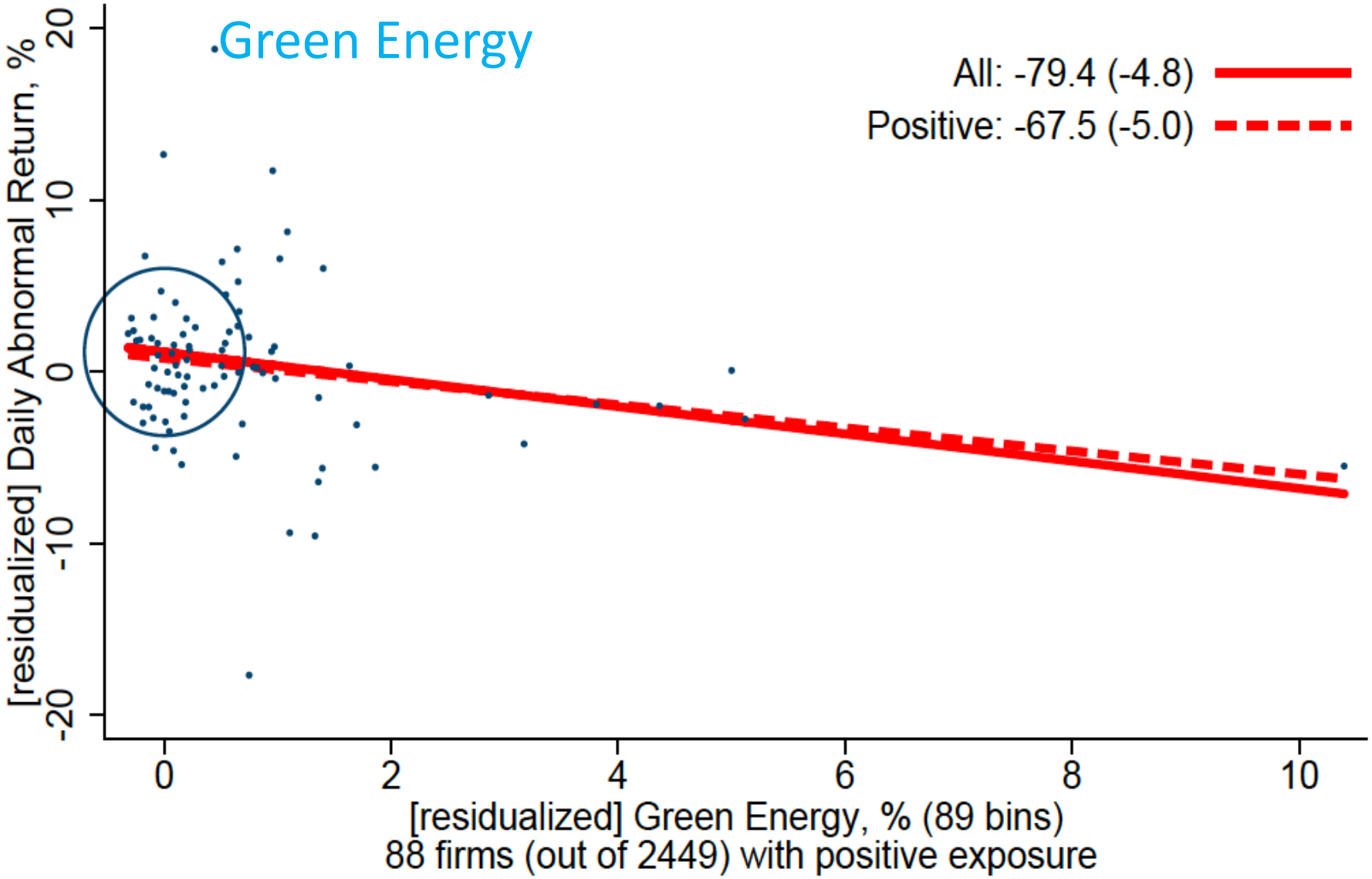
The three stocks with the highest residualized exposure are related to the following companies:
`"UTAH MEDICAL PRODUCTS INC"' (Exposure: 51.0%, TIC: `"UTMD"', Abn. ER: 5.8%)
`"HALOZYME THERAPEUTICS INC"' (Exposure: 25.1%, TIC: `"HALO"', Abn. ER: 12.9%)
`"NEWLINK GENETICS CORP"' (Exposure: 24.0%, TIC: `"NLNK"', Abn. ER: 7.4%)



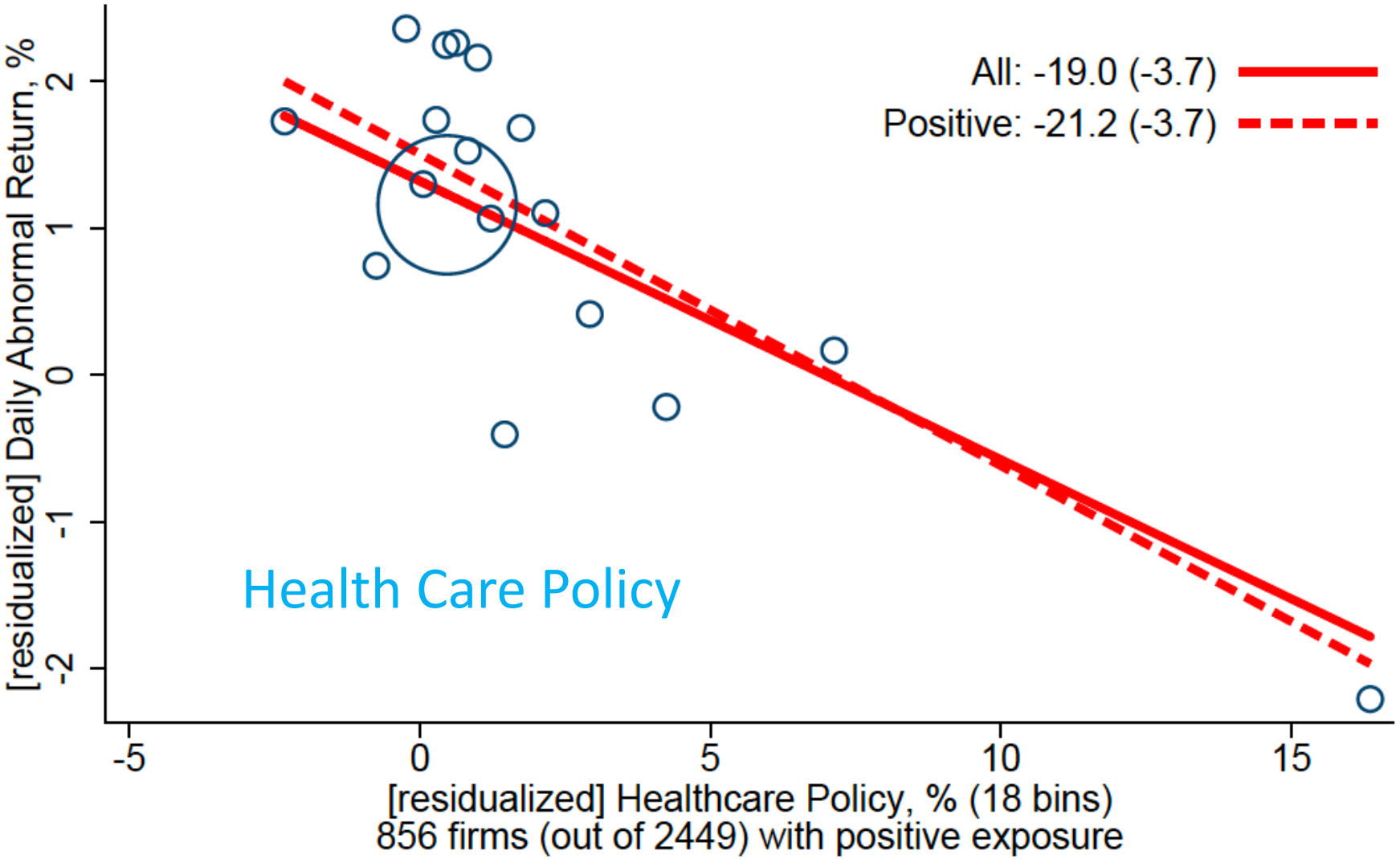
The three stocks with the highest residualized exposure are related to the following companies:
`"SONIC CORP"' (Exposure: 12.9%, TIC: `"SONC"', Abn. ER: 3.9%)
`"INSPERITY INC"' (Exposure: 11.1%, TIC: `"NSP"', Abn. ER: 0.6%)
`"YUM BRANDS INC"' (Exposure: 10.5%, TIC: `"YUM"', Abn. ER: -1.8%)



The three stocks with the highest residualized exposure are related to the following companies:
`"WHITING PETROLEUM CORP"' (Exposure: 41.5%, TIC: `"WLL"', Abn. ER: 0.5%)
`"VECTREN CORP"' (Exposure: 33.3%, TIC: `"VVC"', Abn. ER: -3.1%)
`"OCCIDENTAL PETROLEUM CORP"' (Exposure: 32.8%, TIC: `"OXY"', Abn. ER: -1.7%)

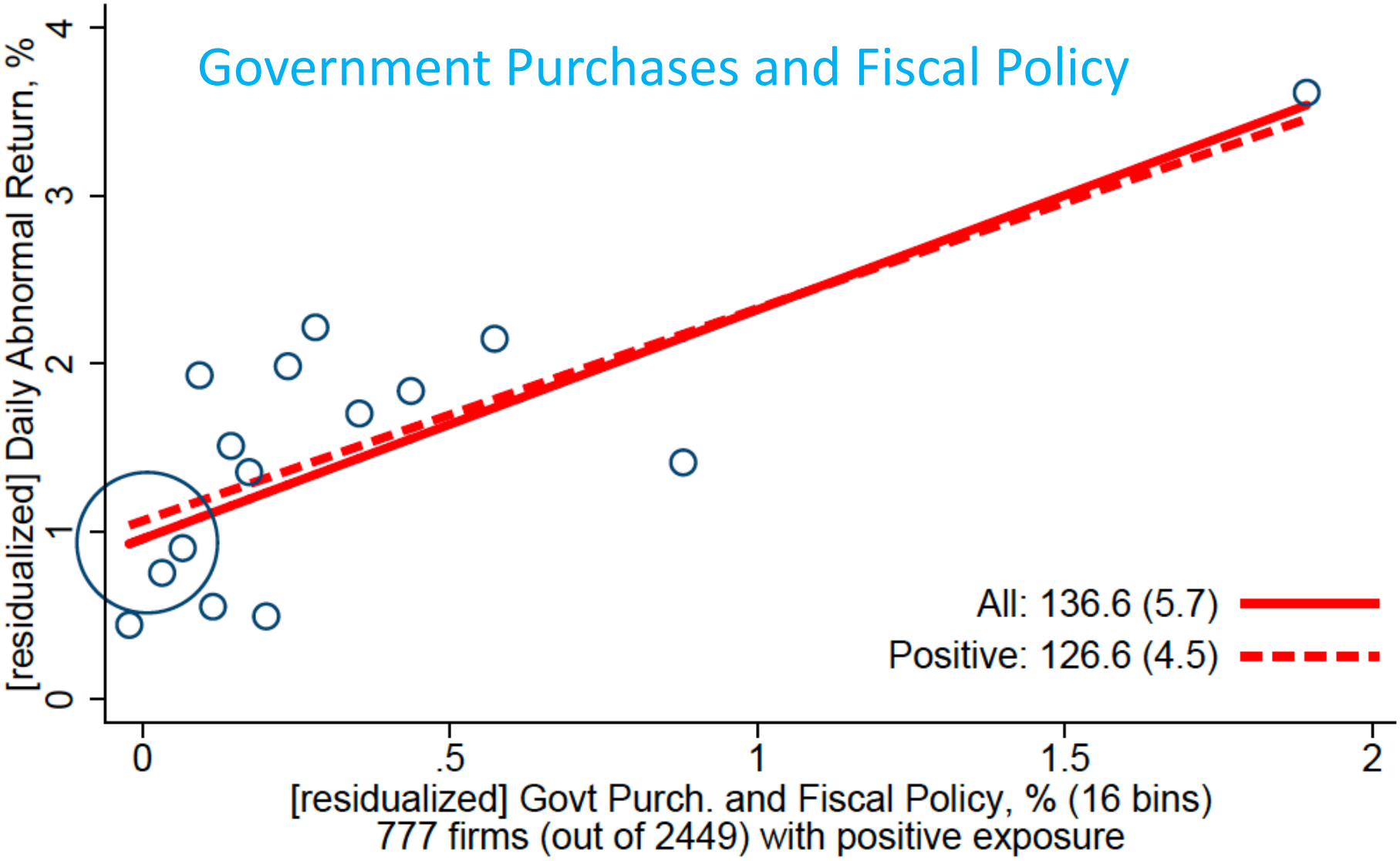


The three stocks with the highest residualized exposure are related to the following companies:
`"NEXTERA ENERGY INC"' (Exposure: 10.8%, TIC: `"NEE"', Abn. ER: -6.8%)
`"SOUTH JERSEY INDUSTRIES INC"' (Exposure: 5.2%, TIC: `"SJI"', Abn. ER: -2.7%)
`"FUTUREFUEL CORP"' (Exposure: 5.1%, TIC: `"FF"', Abn. ER: 1.7%)

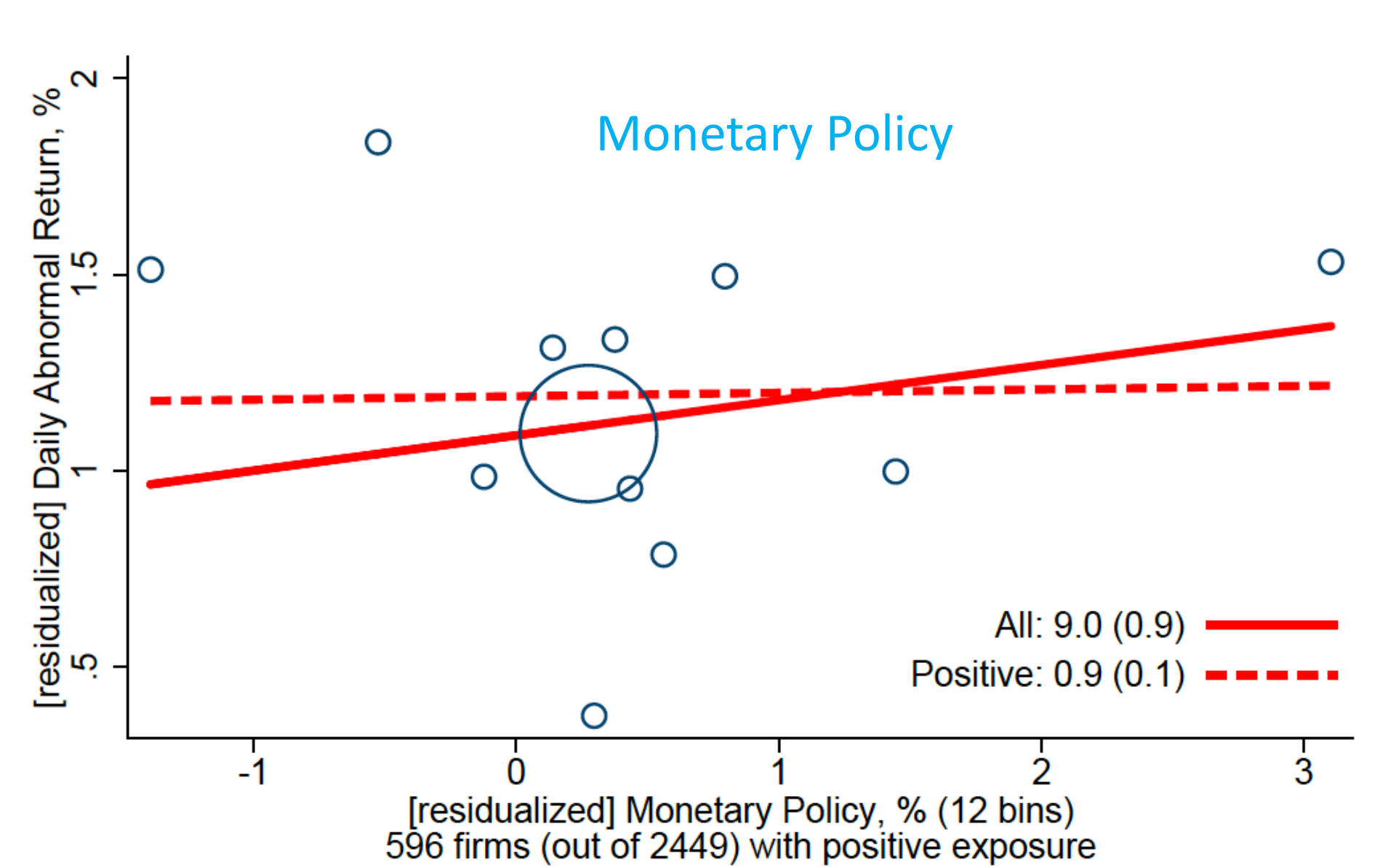


The three stocks with the highest residualized exposure are related to the following companies:
`"CHEMED CORP"' (Exposure: 30.2%, TIC: `"CHE"', Abn. ER: 0.0%)
`"CENTENE CORP"' (Exposure: 30.0%, TIC: `"CNC"', Abn. ER: -22.9%)
`"CVS HEALTH CORP"' (Exposure: 27.5%, TIC: `"CVS"', Abn. ER: 3.1%)

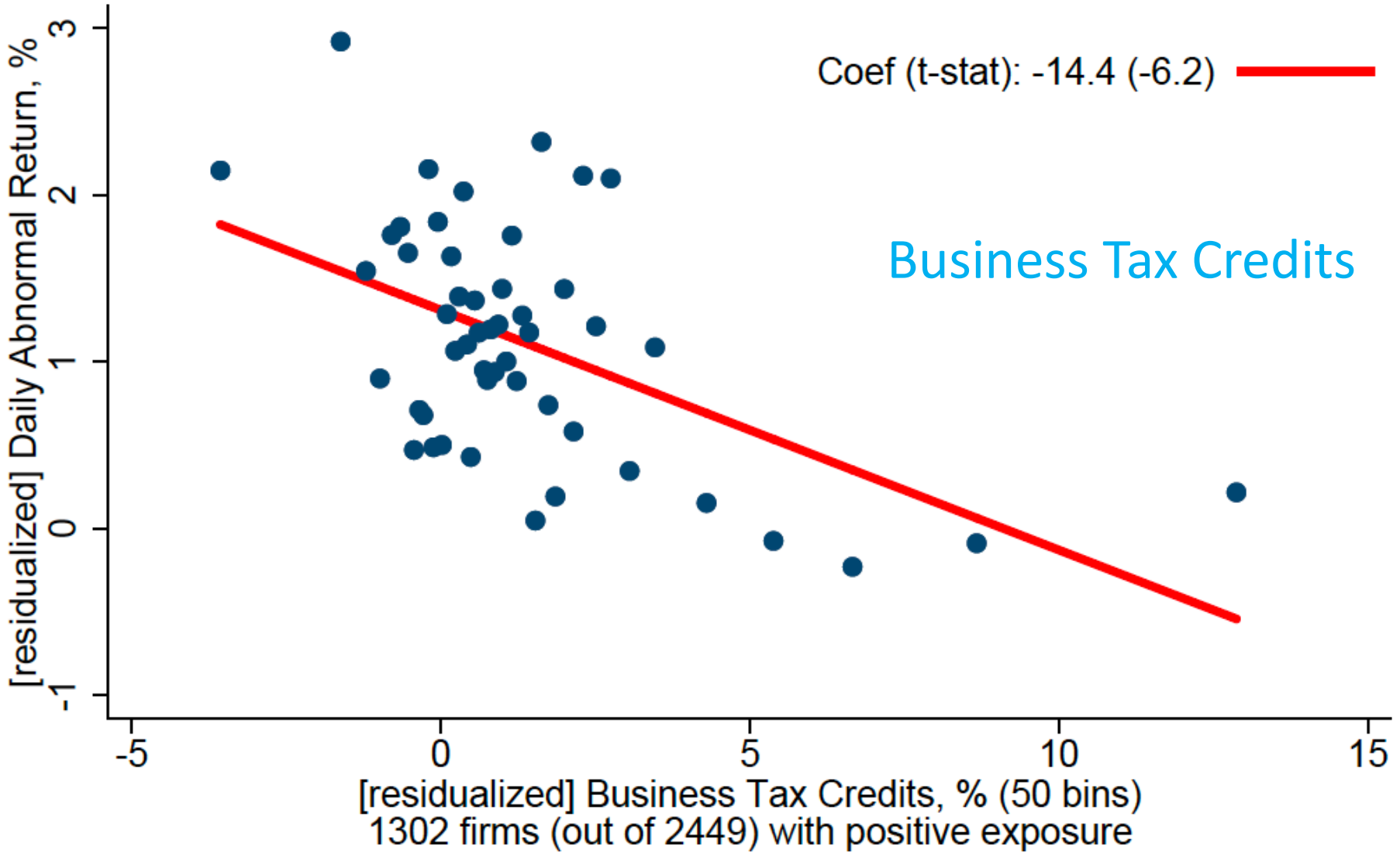
Government Purchases and Fiscal Policy



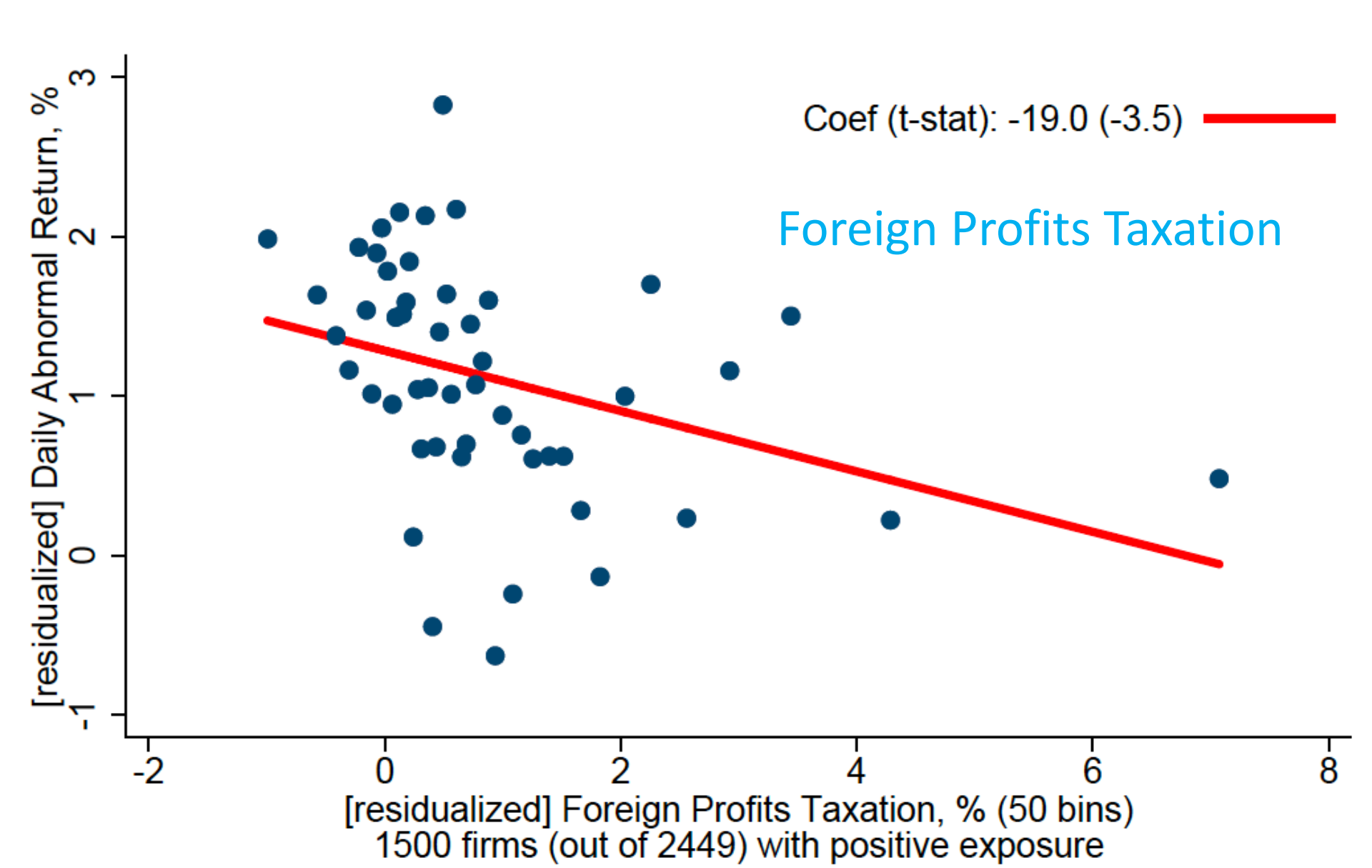
The three stocks with the highest residualized exposure are related to the following companies:
`"ROCKWELL COLLINS"' (Exposure: 5.3%, TIC: `"COL"', Abn. ER: 0.7%)
`"RAYTHEON CO"' (Exposure: 4.2%, TIC: `"RTN"', Abn. ER: 6.5%)
`"GENERAL DYNAMICS CORP"' (Exposure: 3.3%, TIC: `"GD"', Abn. ER: 4.1%)



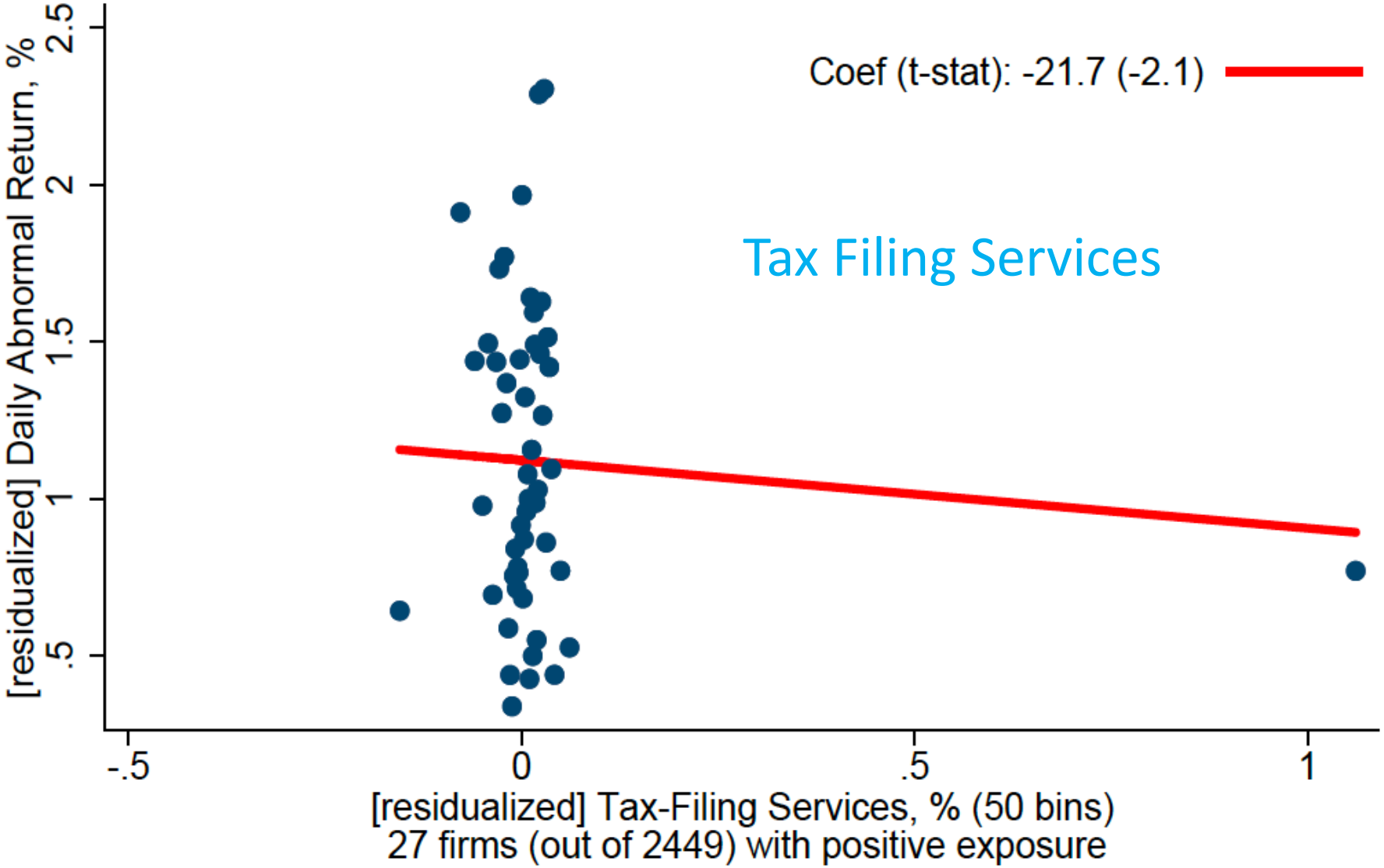
The three stocks with the highest residualized exposure are related to the following companies:
`"FIRST MERCHANTS CORP"' (Exposure: 18.4%, TIC: `"FRME"', Abn. ER: 1.0%)
`"SOUTHSIDE BANCSHARES INC"' (Exposure: 11.7%, TIC: `"SBSI"', Abn. ER: 2.8%)
`"REGIONS FINANCIAL CORP"' (Exposure: 7.7%, TIC: `"RF"', Abn. ER: 3.3%)



The three stocks with the highest residualized exposure are related to the following companies:
`"GAMING & LEISURE PPTYS"' (Exposure: 24.2%, TIC: `"GLPI"', Abn. ER: -3.8%)
`"EQUITY RESIDENTIAL"' (Exposure: 22.1%, TIC: `"EQR"', Abn. ER: -3.0%)
`"DOUGLAS EMMETT INC"' (Exposure: 21.9%, TIC: `"DEI"', Abn. ER: -2.0%)



The three stocks with the highest residualized exposure are related to the following companies:
`"FRANKLIN ELECTRIC CO INC"' (Exposure: 18.7%, TIC: `"FELE"', Abn. ER: 5.1%)
`"YUM BRANDS INC"' (Exposure: 18.3%, TIC: `"YUM"', Abn. ER: -1.8%)
`"KNOWLES CORP"' (Exposure: 11.5%, TIC: `"KN"', Abn. ER: -0.6%)



The three stocks with the highest residualized exposure are related to the following companies:
`"BLOCK H & R INC"' (Exposure: 17.2%, TIC: `"HRB"', Abn. ER: -4.8%)
`"INTUIT INC"' (Exposure: 11.2%, TIC: `"INTU"', Abn. ER: -0.6%)
`"REPUBLIC BANCORP INC/KY"' (Exposure: 4.3%, TIC: `"RBCAA"', Abn. ER: 2.4%)

Comparison to Related Work

From Abstract to Wagner, Zeckhauser, Ziegler (2018, JFE):

"Donald Trump's surprise election shifted expectations: corporate taxes would be lower and trade policies more restrictive. *Relative* stock prices responded appropriately. High-tax firms and those with large deferred tax liabilities (DTLs) gained; those with significant deferred tax assets from net operating loss carryforwards (NOL DTAs) lost. Domestically focused companies fared better than internationally oriented firms."

Adding WZZ variables to our specifications:

1. We obtain similar results for their variables.
2. Including their variables has little effect on our results.
3. But sample sizes shrink, reducing precision

Dependent Variable: Daily Abn. Return from Nov 8 to 9	Baseline		WZZ Cash ETR		Baseline + Cash ETR	
Generic Regulation	8·4	(3·2)			8·1	(3·1)
Labor Regulations	28·7	(4·9)			27·9	(4·8)
Generic Energy	−57·3	(−9·3)			−53·6	(−8·7)
Brown Energy	5·8	(2·9)			6·2	(3·1)
Green Energy	−66·8	(−4·2)			−63·5	(−4·1)
Healthcare Policy	−18·3	(−3·1)			−18·5	(−3·1)
Food and Drug Regulation	14·3	(2·4)			14·9	(2·5)
Intellectual Property Policy	39·9	(2·6)			40·4	(2·7)
Trade Policy	0·7	(0·1)			−1·5	(−0·2)
Financial Regulation	7·6	(4·0)			7·5	(3·9)
Monetary Policy	2·3	(0·3)			3·8	(0·4)
Govt Purch. and Fiscal Policy	132·1	(5·5)			131·2	(5·5)
Entitlement and Welfare	−192·4	(−1·5)			−198·4	(−1·6)
Taxes on Business Profits	3·7	(0·2)			2·6	(0·1)
Business Tax Credits	−14·2	(−5·8)			−10·5	(−3·8)
Foreign Profits Taxation	−14·9	(−2·6)			−15·5	(−2·7)
Sales and Excise Taxes	−8·5	(−0·7)			−10·3	(−0·8)
Tax-Filing Services	−19·1	(−1·8)			−20·4	(−1·9)
Generic Taxes	−5·1	(−1·0)			−4·9	(−1·0)
Log Market Cap	−0·4	(−8·0)			−0·4	(−7·9)
Leverage	−0·9	(−2·3)			−0·8	(−2·1)
Cash ETR			3·7	(5·6)	2·2	(3·2)
Observations [Adjusted R^2]	1986	[0.157]	1986	[0.022]	1986	[0.164]

t statistics in parentheses.

In line with their results

We follow their procedures for data trimming, and we restrict their ETR measure is not available for many firms in our sample.

Adding their effective tax rate measure has little effect on our results

Their measure of Cash Effective Tax Rates.

Dependent Variable: Daily Abn. Return from Nov 8 to 9	Baseline		WZZ Foreign Profits		Baseline + Foreign Profits	
Generic Regulation	5·8	(1·3)			4·7	(1·0)
Labor Regulations	27·8	(4·2)			22·9	(3·5)
Generic Energy	−22·6	(−1·2)			−25·6	(−1·5)
Brown Energy	10·3	(2·9)			10·1	(2·9)
Green Energy	−54·7	(−1·0)			−59·3	(−1·1)
Healthcare Policy	−13·5	(−1·2)			−15·4	(−1·4)
Food and Drug Regulation	15·6	(2·2)			16·8	(2·4)
Intellectual Property Policy	21·0	(1·1)			13·3	(0·7)
Trade Policy	7·1	(0·8)			10·3	(1·1)
Financial Regulation	1·3	(0·2)			0·4	(0·1)
Monetary Policy	99·6	(3·2)			97·5	(3·0)
Govt Purch. and Fiscal Policy	147·1	(4·5)			140·0	(4·3)
Entitlement and Welfare	−18·6	(−0·2)			−14·9	(−0·2)
Taxes on Business Profits	28·4	(1·0)			29·6	(1·0)
Business Tax Credits	−14·0	(−2·2)			−14·4	(−2·3)
Foreign Profits Taxation	−8·5	(−1·3)			−2·1	(−0·3)
Sales and Excise Taxes	−17·3	(−1·0)			−18·6	(−1·1)
Tax-Filing Services	−22·7	(−1·7)			−24·7	(−2·0)
Generic Taxes	−5·0	(−0·5)			−5·6	(−0·6)
Log Market Cap	−0·6	(−8·0)			−0·6	(−7·3)
Leverage	−0·5	(−1·0)			−0·5	(−1·1)
Foreign Profits			−1·9	(−4·7)	−1·3	(−3·0)
Observations [Adjusted R^2]	925	[0.110]	925	[0.024]	925	[0.119]

t statistics in parentheses.

Their measure of Percent of Profits from Foreign Operations

Their Foreign Profits measure is available for fewer firms.

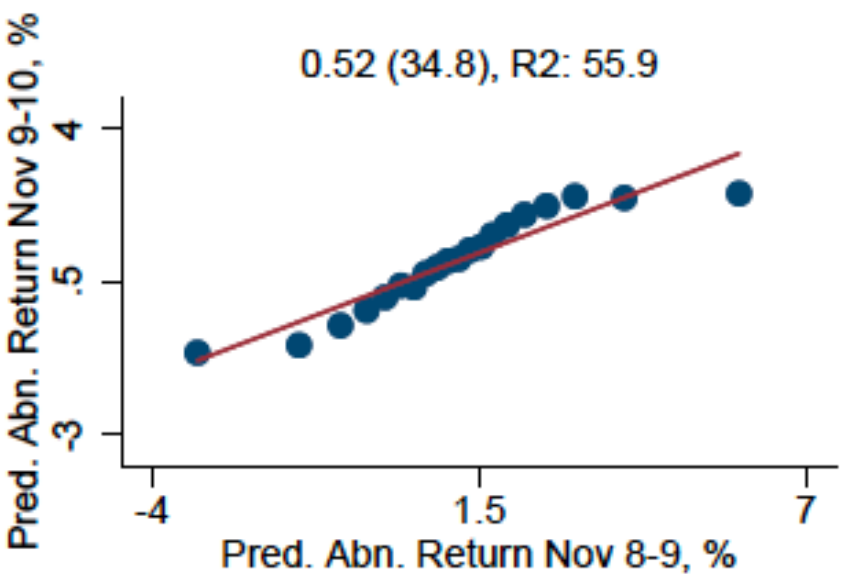
Adding their Foreign Profits share measure has little effect on our results, except to further knock down the effect of our Foreign Profits Taxation variable. Note: Their measure does not knock down Trade Policy.

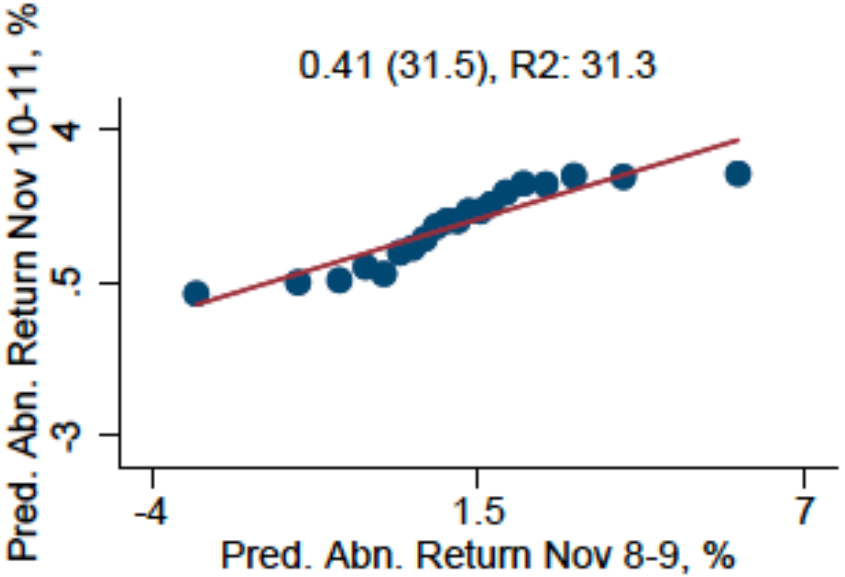
A Slow Market Reaction

The stock market did not fully digest the implications of the election outcome by market close on 9 November. Instead, we find large momentum effects in the conditional firm-level reactions to Trump's surprise victory (i.e., the regression-predicted part of the firm-level returns):

- Abnormal firm-level returns over the next 2 trading days after 9 November strongly reinforced the initial response to the election surprise.
- The shift in (conditional) firm-level abnormal returns over the next 2 trading days was 93% as large as the initial reaction on 9 November.
- Momentum effects had died by the third trading day after November 9 (4 trading days after the election).

Stock Prices Continued Moving in the Same Direction over the Next 2 Trading Days





How we construct these two charts:

1. Fit our regression model separately to firm-level returns on November 9, 10 and 11, letting the coefficients vary freely across days.
2. For each trading day, recover the model's predicted values for each firm.
3. Plot the predicted values for November 10 (left chart) or November 11 (right) on the predicted values for November 9.
4. To improve visual clarity, group the firm-level data into 20 bins defined on predicted returns for 9 November. The reported coefficient (t-statistic) and R-squared values are for the underlying firm-level regression.

Similar Market Behavior on Other Days?

No!

1. We reran our regression model on each day in a one-year window before 8 November 2016 (election day).
2. We find no evidence that daily firm-level equity returns respond to our policy risk exposures before the election in the same manner as their response on 9 November.
3. The same conclusion holds for the 3 best and the 3 worst market days in the one-year pre-election window.

What does this mean?

- Our results for 9 November 2016 do not reflect some omitted factor that is systematically related to daily firm-level equity returns.
- Trump's surprise election victory shifted firm-level equity prices in an unusual manner.

A Similar Return Structure on Other Days? No

Dependent Variable: Daily Abnormal Return	Avg. Result for Prior Year		Avg. Result for 3 Largest Gains		Avg. Result for 3 Largest Drops	
Market-Level ER [IQR]	0.0 [1.8]		2.6 [2.5]		-3.5 [3.4]	
Generic Regulation	−0·1	(−0·1)	0·0	(0·2)	−1·1	(−0·8)
Labor Regulations	−0·4	(−0·1)	2·6	(0·5)	−0·2	(−0·2)
Generic Energy	0·8	(0·1)	17·3	(2·3)	16·2	(3·1)
Brown Energy	−0·1	(−0·1)	−4·0	(−1·5)	2·9	(1·9)
Green Energy	0·0	(0·0)	15·0	(1·5)	11·9	(1·0)
Healthcare Policy	−0·2	(−0·1)	0·1	(0·4)	2·8	(2·4)
Food and Drug Regulation	−0·6	(−0·2)	−5·8	(−2·9)	−1·9	(−0·5)
Intellectual Property Policy	−0·4	(0·0)	1·7	(0·2)	3·7	(0·7)
Trade Policy	−0·1	(−0·1)	−1·7	(−0·5)	−1·8	(−0·1)
Financial Regulation	0·0	(0·1)	−3·1	(−2·1)	−3·4	(−2·4)
Monetary Policy	0·5	(0·1)	−3·6	(−0·7)	−2·1	(−0·2)
Govt Purch. and Fiscal Policy	0·4	(0·1)	−8·4	(−0·5)	−11·7	(−0·9)
Entitlement and Welfare	−0·7	(0·0)	−27·2	(−0·5)	15·4	(0·3)
Taxes on Business Profits	1·0	(0·1)	2·0	(0·2)	5·8	(0·4)
Business Tax Credits	0·2	(0·1)	5·0	(2·7)	7·6	(4·7)
Foreign Profits Taxation	−0·1	(0·0)	1·3	(0·2)	−9·4	(−2·8)
Sales and Excise Taxes	1·2	(0·2)	9·5	(1·3)	8·2	(1·1)
Tax-Filing Services	−0·5	(−0·0)	2·3	(1·2)	1·3	(0·0)
Generic Taxes	0·1	(0·1)	0·8	(0·1)	−0·0	(0·0)
Log Market Cap	0·0	(0·3)	0·0	(0·0)	0·0	(0·9)
Leverage	−0·0	(−0·0)	−0·0	(−0·1)	−0·2	(−0·7)
Observations [Adjusted R^2]	2447	[7.3]	2446	[4.7]	2447	[8.5]

t statistics in parentheses.

Digging Deeper (Preliminary)

1. Consider firm-level returns on pre-election Wolfers-Zitzewitz dates: Initial results align fairly well with post-election pattern. WZ dates involve much smaller shifts in election probability → less precise estimates.
2. (How) do momentum effects vary by?
   a. Market cap
   b. Liquidity
   c. Length of Part 1A discussion of risk factors
   d. Length of Part 1A discussion of policy risk factors
   e. Multiplicity of policy risks in Part 1A
   f. Number of 10-K filings with non-empty Part 1A from 2006 to 2016

Exploring the Momentum Effects

- Let $AR_{i,d}$ denote the abnormal return of firm i on day d after the November 8 election, and let $\widehat{AR}_{i,d}$ be the corresponding fitted value from the cross-sectional regression of abnormal returns on a vector of policy risk exposures and controls:

$$AR_{i,d} = X_i\beta + \epsilon_i \qquad (1)$$

- Earlier, we reported momentum coefficients γ from regressions of the form,

$$\widehat{AR}_{i,d} = \alpha + \gamma_1 \widehat{AR}_{i,1} + \zeta_{i,d} \quad \text{for } d = 2,3. \qquad (2)$$

- Now sort firms into deciles defined by Market Cap, Liquidity, etc. Rerun regressions (2) by decile.

Measuring Market Cap and Liquidity

Market Cap: $Ln(\text{Average Daily Market Cap})$

Amihud Liquidity: $Ln\left[\frac{1}{\frac{1}{N}\sum_{t=1}^{T}\frac{|ER_t|}{cshtrd_t * prccd_t}}\right]$

where denominator inside [ ] is a daily "illiquidity" ratio: Average of daily equity return divided by stock's same-day dollar volume.

We compute both using daily data in the year prior to 8 November 2016.

Measuring Length and Multiplicity

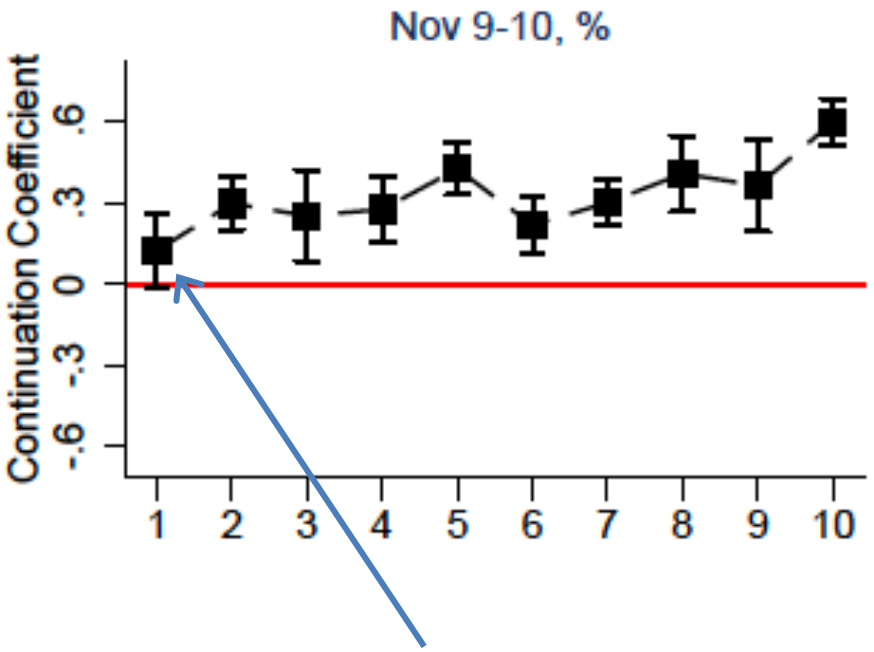
Length A: *Ln*{2006-2016 mean of Part-1A sentence count}.

Length B: *Ln*{2006-2016 mean count of Part 1A sentences that contain a policy term}.

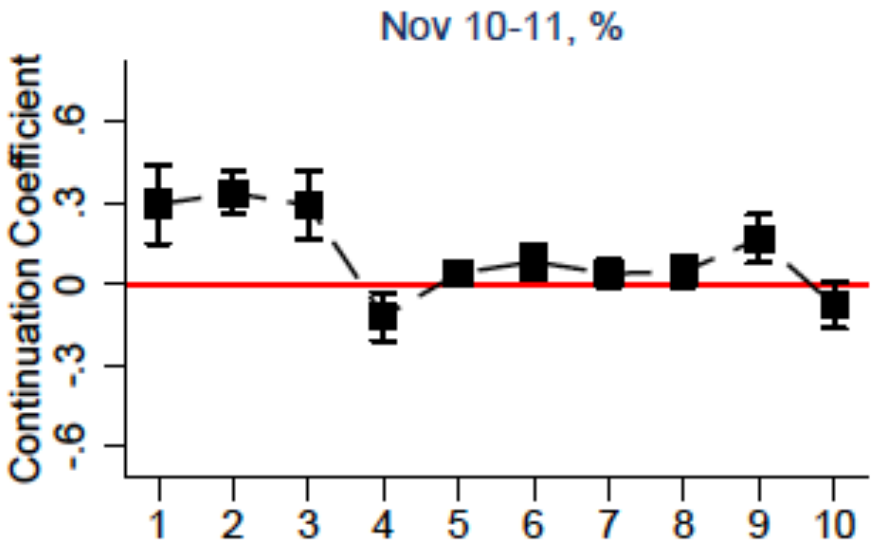
Multiplicity: Among the policy categories in our main regression specification, the 2006-2016 average share with a policy risk exposure value above the cross-firm mean exposure value.

By Market Cap Deciles

Day 2 fitted value regressed on Day 1 fitted value

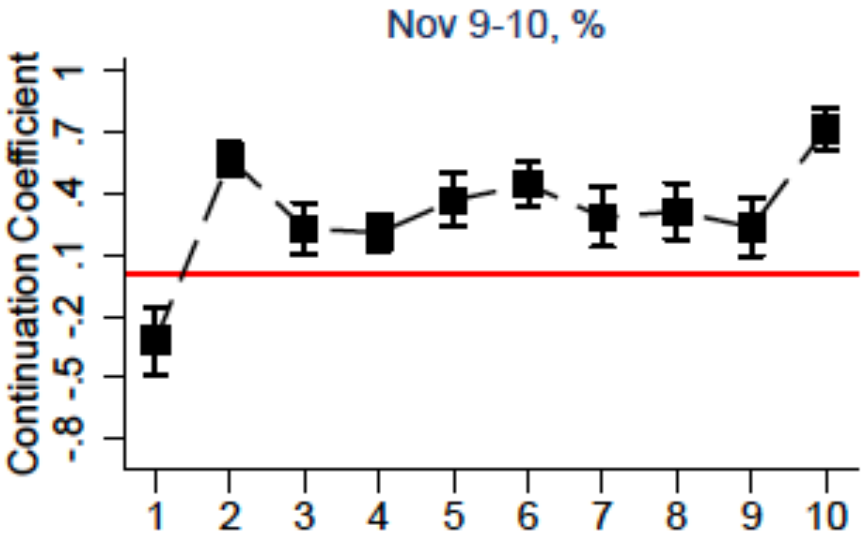


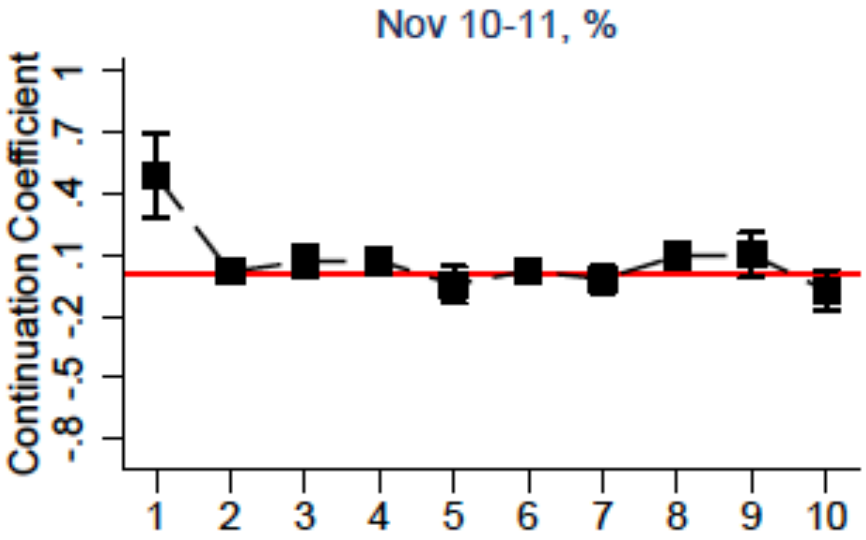
Day 3 fitted value regressed on Day 1 fitted value



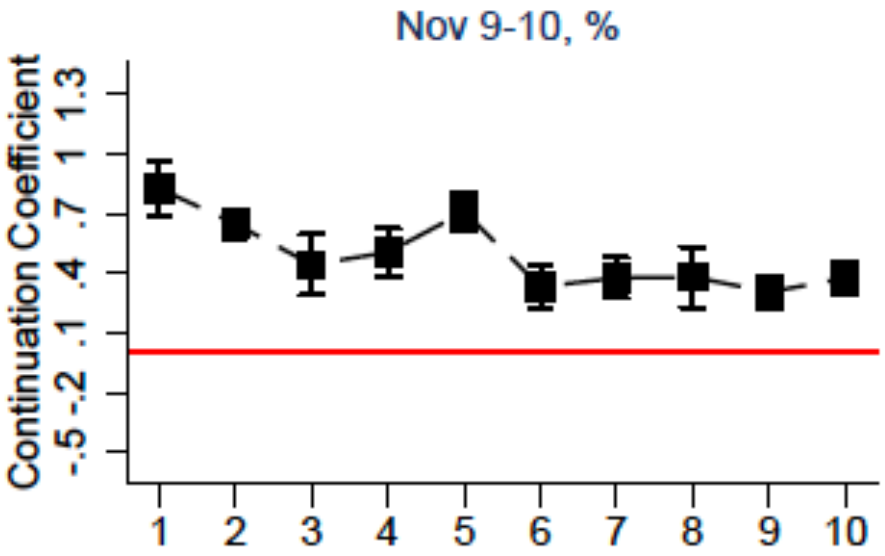
Momentum parameter among firms in the first (lowest) market cap decile.

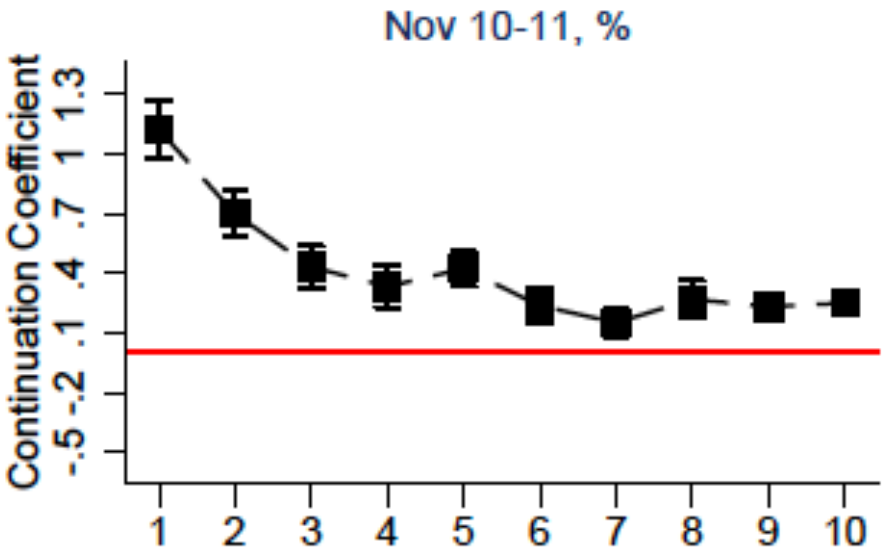
By Liquidity Deciles



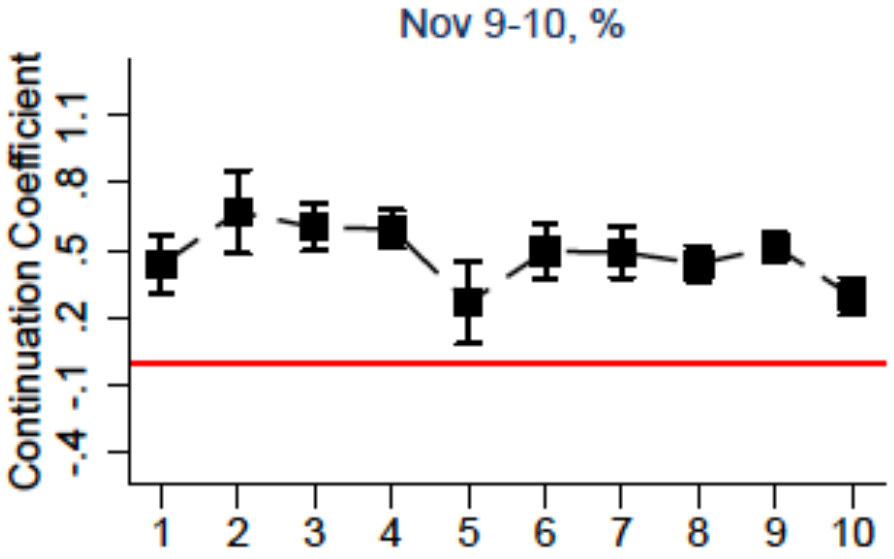


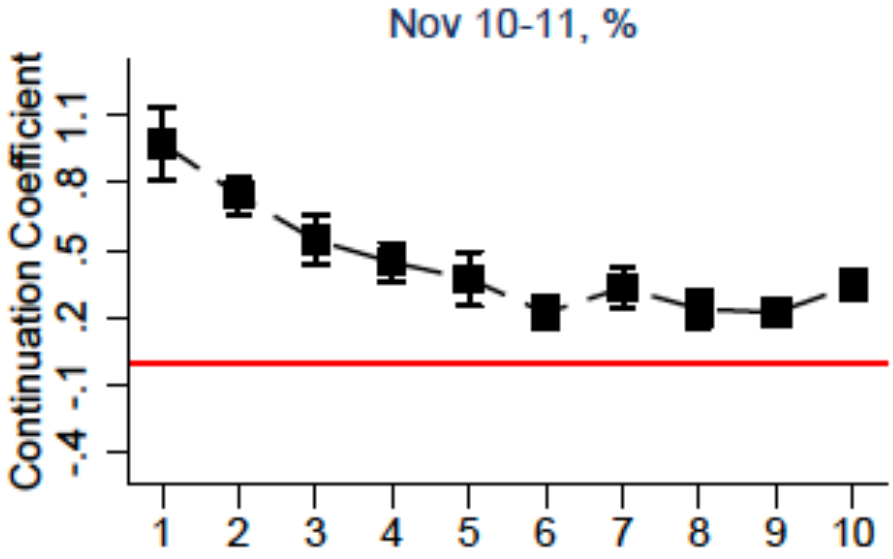
By Length A Deciles (All Sentences)



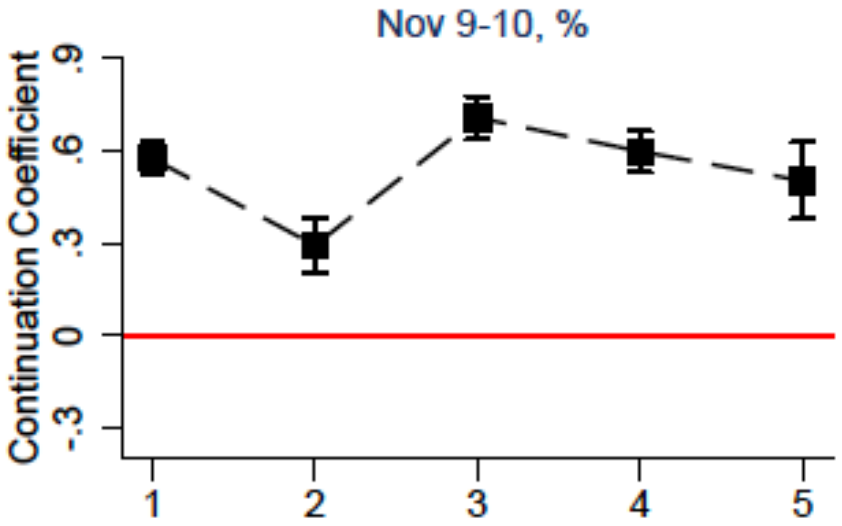


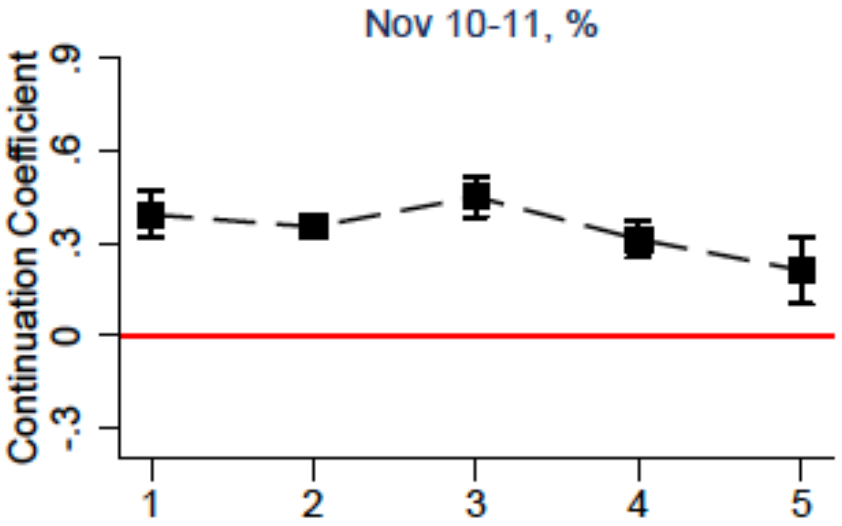
By Length B Deciles (Policy Sentences)





By Multiplicity





Summing Up & Taking Stock

1. The election surprise triggered a large, positive stock market response on 9 November, strongly contradicting pre-election assessments of how the market would react if Trump won.
2. Equity returns varied enormously across firms on the day after the 2016 election.
   - Equity returns dispersion was also extraordinarily large on days 2 and 3 after the election.
   - This pattern is not a feature of returns behavior in the wake of other (recent) past presidential elections.

3. Policy risk exposures calculated from the text in Part 1A of 10-K filings explain much of the cross-firm differences Day-1 equity returns (20% in our current specification):
   - Firms with high exposures to Generic Regulation, Labor Regulation, Food and Drug Regulation, Financial Regulation, and IP Policy saw especially high equity returns on 9 November,
   - Firms concerned about “green” (“brown”) regulations and subsidies had relatively low (“high”) returns.
   - Firms with high exposures to healthcare policy risks fared poorly.
   - High policy risk exposure to Government Purchases involved higher returns.
   - Firms concerned about Business Tax Credits, Taxation of Foreign Profits, and Sales and Excise Taxes performed relatively poorly.

3. We don't see a similar pattern in daily firm-level returns before the election, except for (weak) evidence on a handful of pre-election days that involved large changes in Trump's victory probability.
4. **(Momentum)** The stock market did not fully digest the implications of the election outcome by market close on 9 November.
   - Instead, (conditional) firm-level returns over Days 2 and 3 after the election strongly reinforced the initial market response to the election surprise on Day 1.
   - The shift in conditional firm-level abnormal returns over Days 2 and 3 after the election was 93% as large as the initial shift from market close on 8 November to market close on 9 November.
   - These momentum effects died out by Day 4 after the election.

5. These results suggest that equity prices do not immediately and fully adjust to surprise events that (a) involve unusual shifts in the structure of price-relevant risks and (b) require large information processing resources to fully assess.
   - Human collection and processing of available information is costly, and it takes time. Thus, the surprise realization of events that satisfy (a) and (b) need not be fully and immediately incorporated into equity prices.
   - This explanation might sound like common sense. But it's at odds with the Efficient Markets Hypothesis, which says that stock prices quickly adjust to publicly available information. A pricing response that settles in over 3 trading days is not quick.

6. Our preliminary investigation finds that momentum effects are weaker for firms that issue lengthier discussions of their risk factors in Part 1A.
   - A possible interpretation: A lengthier discussion in Part 1A enables market participants to more quickly assess (and trade on) the implications of the election surprise for the firm's value.

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